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Concepts of Philosophy

IN THREE PARTS

PART I—ANALYSIS

PART II—SYNTHESIS

a. FROM PHYSICS TO SOCIALITY

b. FROM SOCIALITY TO RELIGION

PART III—DEDUCTIONS

101368

By

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To

MY PUPILS

PAST AND PRESENT

WITH WHOM I HAVE ENJOYED

THE PRIVILEGE OF DISCUSSING MANY

OF THE THEMES TREATED HERE

THIS VOLUME

IS AFFECTIONATELY

INSCRIBED

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PREFACE

THE doctrine of this book is that consciousness, when adequately conceived, is the great reality. This doctrine can be maintained, however, only when consciousness is identified with the energy or activity that becomes aware of itself and its object, and not simply with that awareness itself. Consciousness is not merely an awareness, but is rather, the being that performs that function. Moreover, consciousness is the bearer of a deeper function; namely, that central effort of selfhood and will by which experience realizes its world. Furthermore, consciousness is conceived here in its most comprehensive sense as including not only an activity that becomes aware of things and of itself, but also that earlier and more primal activity, regarded from the point of view of a developing process, which antedates and grounds awareness, and may be represented as subliminal, and not as yet aware of either its object or itself. This activity, which James somewhere calls *sciousness* is taken here to be of the same type as that which acts as conscious function, higher up in the scale. It is conceived as the embodiment of the energy which we call physical and as working out in the mechanical movements and categories of physics and mathematics. Physical movement constitutes what we call the mechanical stage of phenomena, while mathematics arises out of the forms of space and time and number when these have been taken up by reflection.

In dealing with physics and mathematics the aim has

been not to trespass on territory in which the physicist and mathematician alone can tread with assurance, but rather to confine the investigation to that presuppositional groundwork of these sciences which determines the kind of a world with which they set out and in which they are interested. For this reason we have little to say regarding the more refined conceptions of physics, or those later developments of mathematics in which that science bids fair to realize the programme of Aristotle by breaking through the trammels of the more elementary concepts of quantity, and occupying the whole field of logic as its proper domain. These fields are not entered, but what is here maintained is that when we penetrate to the first presuppositions of these sciences we come upon the world-views which form their points of departure and which we have endeavored to determine.

In prosecuting this enterprise, not alone in connection with physics and mathematics, but also in connection with the entire scale of sciences from physics to religion, we have aimed to exemplify the cardinal function of philosophy. We have claimed for philosophy the right to exercise that function of synthesis in which, through a correlation of the concepts of science and metaphysics, a real grounding and unification of the whole field of knowledge may be effected. In order to effect a real synthesis, philosophy must first seek the principles of grounding in a metaphysical doctrine that shall fit in with and complete the presuppositional bases of the sciences. Having accomplished this task, it must seek a real unification of the world by such an organization of the insights of science and metaphysics as will achieve a fundamental unity and not a mere eclectic accommodation. To achieve the aims herein indicated, has been the inspiration of this prolonged effort, the success of which remains to be determined by the judgment of those who are competent to decide regarding the issues involved.

My obligations, which are many and fundamental, have been recognized generally in connection with the various

topics discussed. Further than this it would be impossible within reasonable limits to go. There is one obligation, however, that does not appear explicitly in the text, and which I wish, therefore, to acknowledge here. I wish to record my indebtedness to James Ward, not only for the stimulus of his written works, but also for that of personal intercourse. The concepts of scientific terms which I have been led to adopt are in some instances different from his, though, as I think, not inconsistent with them. Dr. Ward, as I understand, would limit the scope of mechanism, for example, to mathematical physics, whereas in these discussions it has been represented as co-extensive with the scope of natural causation. It is with some diffidence that I have proposed the wider conception.

I wish, also, to acknowledge my great indebtedness to my friend and colleague, Roger B. Johnson, to whose painstaking care in reading the manuscript and correcting the sheets as they passed through the press, this volume owes its freedom from a multitude of imperfections.

ALEXANDER THOMAS ORMOND.

Princeton, Aug. 21, 1906.

GENERAL INTRODUCTION.

ONE of the most characteristic features of our time is its tendency to specialism, affecting as it does men's horizons as well as the scope of their activities. What we may think of this condition is a matter of secondary moment, inasmuch as it is the inevitable outcome of the vast extension of the fields of possible knowledge open to the modern mind. It is more important to consider what is to be done about it in view of some of the most serious consequences it entails. These consequences are accustomed to show themselves in two forms, one subjective, the other objective. Subjectively speaking, most of us have had experience of the fact that the degree of concentration necessary to make our specialty go has had the effect of diminishing our sense of the value of things that happen to lie outside the limits of our own chosen field. And we are painfully aware that this shrinkage of value is not objective, but due wholly to our own contracting vision. I sit in my study for hours with my eyes glued to my manuscript, or to the experiment I am conducting, and when I drop my work and go out into the open, the heavens are a blur and the landscape a mottled page whose objects are hardly distinguishable. It takes time to readjust my optics to the requirements of the far as well as the near. The effect in the field of mental effort is that my intellectual vision is contracted and I am led to become the partisan of some narrow epistemological creed; or, if my temperament be that of a Hume, my punishment

will come upon me in the form of a reaction that whelms my own point of land with the rest of the continent, in scepticism.

Objectively, this eclipse of mental vision has led to divisions, collisions, disintegrations, and, in the end, too often to a total disbelief in knowledge and to a fruitful crop of negative dogmatics. In the first place the traditional conflict between physics and metaphysics has become more, instead of less, uncompromising, the latter meeting the open contempt of the former with a good measure of scorn in return. Again, philosophy and science find themselves at odds, each vehemently discounting the methods and results of the other. Moreover, religion and secularism beg leave to join the chorus, each lifting up its voice in testimony against the other. The culturists are also like a house divided against itself, the poets and the logicians refusing to lie down together, while the humanists and the naturalists despitefully use one another. Like the ancient Jews and Samaritans, the physiologists and the introspective psychologists will have no dealings, while the epistemologists and theologians find themselves on opposite sides of the fence of knowledge. And even within the four corners of a single science the specialists in one field look down with hearty contempt upon those workers in a different quarter who refuse to pronounce their shibboleth.

Accompanying this narrowing of sympathy and perspective, we find a tendency to lose and confuse the sense of values. While structurists and functionists are fighting out their issue to a finish, and while the feud between the experimental and introspective psychologists sometimes threatens a vendetta, men are generally either losing their sense of relative values and becoming sceptical indifferentists, or, forgetting that there may be different kinds of value, they seize upon one of the many species and endeavor to make it absolute and exclusive.

For this reason we have the air filled with the din of the conflict between pragmatists and rationalists, while in the

field of metaphysical ultimates there is a drawn battle between the pluralists and what we may call, in view of its most noted advocate, Royce's fourth conception of being.

I do not overlook the fact that there is a certain sense of humor pervading all this vaporing and conflict, or that a measure of the apparent difference may be ascribed to that spirit of good-natured chaff which is apt to mark the intercourse of workers in adjacent fields. No doubt when we deduct something for mere appearance, a part of the evil disappears and we may cherish the belief that men are inwardly not so sceptical or so unresponsive to ideals as outwardly they seem to be. But when due allowances have been made, it still remains true that antagonism and chaos prevail to distressing degree, and that while the Humian sceptic is not a *rara avis* by any means, he probably does not turn up so frequently as the one who has simply lost his grip on the elements of culture as a whole, and who, in a dazed sort of way, is looking north for his metaphysics, south for his religion, east for his science, while the west is to him simply a *terra incognita* of undefined terrors.

In short, we of the present generation are paying the natural penalty for our specialism in the eclipse of our faith in the unity of truth, and in the tendency of the elements of our culture to break away from our control and fall into a condition of reciprocal hostility and conflict.

Now, it is not to be expected that men, by simply taking thought, will be able to remedy such a situation. The root of the disease is too deep for superficial remedies. There is a gravitation in the centrifugal direction which belongs to the very spirit of intense concentration on relatively minute fields which will prove stronger than all our efforts to check it and keep it in bounds. The true antidote will only be found in a discipline whose special business it shall be to investigate the grounds and principles of the whole body of truth with a view to its unity and meaning as a whole. The very characterization of such a task will, no doubt,

discredit it in advance in the eyes of many. Nevertheless, we propose to push its claims here, not only by pointing out its problems, but also the method by which we think its solutions are to be attained. That there is a call for such a task need not be argued after what has been said above. That there is a real problem left over by the special investigations now in the field, becomes clear when we remember that the interest underlying each specialty is mainly confined to its own things, and that the result in the whole field of culture is unmediated confusion. It is no one's business to look after the correlation of the elements and the unity of knowledge as a whole. There is no discipline which takes its departure from the sense of the whole, but each is actuated by the sense of some part or fragment of the whole. And while it may be true, as some will object, that no reliable result can be attained by proceeding from this point of view, yet we are justified in replying, at this stage of our inquiry, that the question of results is one apart from the question of the reality of the problem which is to be solved. That there is a sense of the whole, and that it supplies real problems for investigation which the special sciences do not attempt; this is our justification here for the claim that some investigation is called for whose special business will be the occupation of this standpoint and the consideration of these problems.

To this discipline we apply the old name, philosophy, and we are about to claim for it the old function of unification and the old interest in the whole upon which the exercise of this function proceeded. Now to a discipline so conceived, what, we may ask, would appear to be its central motive; I mean the motive by which it would be led to its characteristic results? And the answer, when we really understand the situation, will be, that this motive will be a sense or a demand for synthesis. Philosophy in the very nature of the case must be synthetic, and it will not abate from this claim if it be found that the philosopher is called on to wade through seas of analysis in order to

reach the data from which his results are determined. The point of value is that these results are synthetic and that the first interest of philosophy is always synthetic. The spirit and the dominating method of philosophy will, therefore, be synthetic. It is easy to make this claim, however, and it may be a very different matter to exhibit the situation in such a way as to show how the synthetic character of philosophy arises and how it is necessary. Nevertheless, it is this task that we are about to undertake.

The synthesis we are advocating here is not one that has its motive in anything to be found on the surface of the modern situation. So far as mere surface indications are concerned nothing is needed but a little of the spirit of compromise and an accommodating eclecticism. But philosophy can have no fellowship either with compromise or eclecticism. Philosophy, like science, has truth in view and must go straight to its goal. The prime motive for the synthesis of philosophy lies even deeper than specialism itself and the disintegration it works. It is to be found in a species of dualism which affects the foundations of knowledge itself, and threatens to rive our world in twain. Historically, the most impressive modern instance of the vindication of this function for philosophy is that of the deep-thinking Kant. Students of Kant are beginning to see more clearly than before the kind of dilemma he was facing when he achieved what he called his Copernican revolution. The secret is wrapped up in the pre-critical period of Kant's development, the study of which shows us that before the Copernican revolution took place, Kant's breach with the traditional rationalism had become final, and no return to it was possible. The vital elements in the situation, as he faced it, were: (1) The Newtonian physics with its representation of an objective order to which consciousness must adjust itself in the effort of knowledge; (2) The English empiricism with its objective order of sensations to which thought must adjust itself in the effort of knowledge. The two disciplines had this

in common: both assumed the fixity of the objective order and the necessity that the subjective order of thinking should adjust itself to a predetermined objective order. Kant puts its tersely. Previous thought had assumed that things are central and that our thoughts must revolve around them. But Kant proposed a reversal of the order, making thought central and putting the *onus* of adaptation on things.

We cannot tarry here to interpret Kant. But what Kant saw that made the revolution possible was something of which the empirical philosophers had not dreamed. He discovered the *fundamental relation of consciousness to the world.* And when he denied the claim of these objective orders to be allowed to dictate to thought, he had not in mind to re-establish a subjective order like that of Berkeley. So far as Berkeley is concerned Kant was loyal to the objective order. He denied its claim of dictation because he discovered that consciousness had been beforehand in the business and had constituted the very orders which we call objective. Kant repudiated the dualism of previous thought; its assumption that there is a world wholly outside of consciousness, which consciousness must contemplate and adapt itself to; in favor of a view that makes consciousness central in its world and the world itself objective content of consciousness. That Kant did not completely master his own idea is admitted. But he went far enough to enable us to grasp the real meaning of his categories. They are the modes of that forehanded activity of consciousness by means of which it constitutes the objective, and reduces its order to the status of its own creation. If the world is the objective content of consciousness, then it follows that the world must adapt itself to the congenital constitution of consciousness in order to get itself either realized or known. *The categories are this congenital constitution,* and the world, in order to get itself known or realized, must first be introduced subjectively in sensation and its order. These supply the material of the

next stage in which it is fully objectified and takes its place as objective content of consciousness by means of its coalescence with these congenital functions of consciousness, which give it form and relation and meaning as elements of an objective system. Moreover, Kant does not dream that he has been upsetting the standpoint of natural science. He conceives that he has been re-establishing it on a firmer basis than the dualism on which it had stood before. What he fundamentally intended he accomplished, and that was to establish the doctrine that while in the ordinary activities of knowledge it is necessary for us to adapt our thoughts to the condition of things, yet this superficial relation has its roots in a more profound relation in which thought, by virtue of its congenital forms, really constitutes its world.

Now Kant conceives the business of philosophy to be the exploiting of that profound synthesis by virtue of which consciousness asserts its primacy in the world by maintaining its prerogative as the source of the orders of both subjective and objective phenomena. The Copernican revolution in astronomy was one that revolutionized men's conceptions of the material world while leaving their perceptions untouched. The Kantian revolution in the mental world is one that, when fully understood, works a revolution in our conceptional world, but leaves the perceptional world unmodified. In fact, the standpoint of natural science remains as it was before and it is only from the philosophical point of view that it requires a new interpretation. The vital point of Kantism in this connection is found in the fact that Kant has come upon a dualism in his world and discovers in synthesis the principle of its cure.

Now the historic interpretation of Kant brings his thought into close and vital relation with the problem as it affects our present day thinking. The dualism of the present that hurts our thinking worst and that stands most in the path of unity is that which separates natural science

and metaphysics. It is not too much to say that between natural science and metaphysics there is absolutely no fellowship, and that if the naturalist does not start out by washing his hands of metaphysics he is very soon reminded of the necessity of such ablution. The metaphysician may not have such strong feelings in the matter as the naturalist, nevertheless he yields to the expediency of performing some rite which will purge him from the suspicion of naturalism. The ritualistic phase of the relation may, however, be accredited to the humors of the situation. The serious aspect arises when we consider that a naturalism that has broken with metaphysics, or, at least, with all for which metaphysics stands, has virtually parted company with its spiritual inheritance. For, rightly or wrongly the metaphysical doctrine of the world has always claimed a special prerogative in the sphere of the ultimate questions of being and destiny, and the metaphysical interpretation of the world has come to be identified with the spiritual, so that naturalism versus metaphysics must inevitably fall under the dominion of materialistic conceptions. On the other hand natural science holds the prerogative of fact with which it keeps in close and vital touch, and its methods are, therefore, living methods of experience. Metaphysics versus natural science would thus find itself cut off from a corrective which it very much needs, and like the pre-Kantian rationalism, would be doomed to find its conceptions growing ever more empty and its spirit more dogmatic. Viewed from this point of the compass the situation takes on a serious aspect and we begin to wonder whether we of the twentieth century, with our much greater amplitude of resources, are about to repeat the drama of the eighteenth century, a story of the divorce of what God and nature have joined together and its consequent bitter fruitage, the spectacle of an arid dogmatism confronting a purblind scepticism, neither having any living oracle for humanity.

The condition we have been describing here is no fig-

ment of imagination. It represents an actual situation, for is it not true that it would be difficult to find a naturalist who has any faith in metaphysics, or who believes that fruitful metaphysical inquiry is possible? On the other hand, is it not true that our metaphysical thinking is, unconsciously perhaps, falling into the isolation of the pre-Kantian rationalism? On taking up a representative work on metaphysics, do we not find, as a rule, that its author is attempting to deal with his problems by the dicta of a reason which stands altogether aloof from the ordinary processes of experience? The result is a dilemma between whose horns we have the choice as to which one shall gore us: that of a natural science which has become sceptical of all knowledge which is not strictly measurable in terms of space and time and matter and natural causation, or, that of a metaphysics which has broken with experience and preaches a kind of arid and dogmatic omniscience. Now this unhappy condition has been brought about partly by the faults of metaphysicians themselves, but mainly, I think, through the aggressive agency of modern science. This, I take it, is not greatly to the discredit of modern science, for, with whatever other sins it may be charged, it is not open to the accusation of not knowing its own mind, or of being in any uncertainty as to its characteristic point of view and method. In the first place modern science since Bacon and Newton has been frankly observational. It has taken the point of view of the spectator who simply observes his phenomena, scrupulously avoiding any presumption of community of nature between himself and his object, and trusting to be able to read the laws of the behavior of things from their movements. From this point of view the world is largely material and consciousness is simply a phenomenon among phenomena to be reckoned with only in view of the part it seems to play objectively in connection with the other forces of the world. Or, if science essays to take a closer view of the affairs of consciousness it shrinks from introspection as leading to

no definite results and insists on citing conscious phenomena before the court of psycho-physical parallelism where its testimony can be given in terms of the material and physical. That this fairly characterizes the point of view of natural science I think every one will admit. The order of phenomena with which it deals is objective and physical, and where an order of consciousness obtrudes itself it is harnessed to the car of a physical order and defined in terms of physical symbols.

Neither is natural science in any particular doubt as to its method of getting results. Whether it is called on to deal with the movements of the inorganic or with the movements of organisms, it finds its categories in the physical world and proceeds along the lines of space and time and matter and causation. It does not trouble itself about design, or purpose, or thought, or will, but assumes that all results are traceable to mechanical antecedents. And if it be called on for its doctrine of causation, the principle by which it connects results with their conditions, it points to Bacon who eliminated form and finality from the principle of science and reduced it to one of pure physical efficiency. Moreover, if you interrogate it as to its fundamental concept of the world, the notion which determines the kind of a system it conceives the world to be, the reply is again unhesitating. The world of observation is a system of phenomena or appearances which symbolize underlying forces or substances. These are unknown. It is the business of science to generalize these phenomena or movements, whatever they are found to be, and to connect them as effects with the causal forces which they manifest. And it will be from the standpoint of this systemic category that science will make up its mind as to both the nature and limit of knowledge. To science the staple of knowledge is motion, the inner nature of things is inaccessible, and, regarding the deep things of the spirit which concern the hidden nature, we are obliged to subscribe to the negative creed *ignoramus,* with every

reason to believe that it may be translated into *ignorabimus*.

If now we turn our steps to the camp of the metaphysicians we do not find ourselves in any such bracing atmosphere of clearness and certitude. The metaphysicians differ among themselves on such fundamental questions as that of the nature and limits of knowledge. They are not sure of the *locus* of their starting-point, whether it be *in* consciousness or in some *a priori datum* of reason. They are far from decided as to their method, whether in this regard they shall don the cast-off garments of science and attempt to work the world over again under scientific rubrics, or make a bold dash and construe everything under the categories of design, purpose and finality. In the meantime the confusion and hesitation is disconcerting and demoralizing, and the immortal Tinker's dream of a byway to hell, even from the gates of the Celestial City, is in danger of being realized. Now it is from its own weakness that metaphysics needs most to be delivered. And in order that this deliverance may be effected it must be made sure, like science, that it has a real standpoint, a real method and real problems to solve, all of which are to be found in, or arising out of, the real experience of man and the exigencies of his effort to know and realize the world. Where, then, we may ask, shall metaphysics find a standpoint of fruitful inquiry not already occupied by natural science? If we once become clear as to the externality of the attitude of science, one that leads it to stand aloof from the inner nature of the things it investigates, it will become clear that there is another possible point of departure which is to be found within consciousness itself. As conscious beings we observe that which is outside of us, but innerly we are the subjects of a central effort of consciousness and this effort relates itself subjectively to our consciousness of self, so that it becomes an effort of self, while objectively it takes the form of process of realization. There is an inner conscious effort by which we go out in a process of knowing and realizing; this

effort, then, embodies our own deeper agency and it is in and through it that we are centrally related to our world. It is clear, then, that we have here a point of approach to our world, just as certainly given in consciousness as is the more external standpoint of science, and what we have to ask regarding it here is, why it should not be accepted as a real *bona fide* basis for a world-interpretation. Now the prime condition of this acceptance is that consciousness itself shall be regarded as real and not as a mere epiphenomenon of the physical. The demonstration of the reality of consciousness, however, if practicable at all, is very short. If that to which alone every other real thing *is* real, be itself *unreal,* then the apparent reality of all other things is illusion. Therefore, in order that anything may be real, consciousness must be real. Again, if that which is real be real only to consciousness, then consciousness will not only be real itself, but it will supply the standard of reality. So far as I can see, there is no escape from this conclusion. It sums up both logic and experience.

But the conclusion is far reaching. If consciousness be real, then it is the great reality and will supply the criteria of all reality. So far I do not see any room for dissent. Let us then make a deduction or two from our premises. In the first place the reality of consciousness reifies (if we may use the word) any standpoint from which consciousness makes a genuine effort to penetrate or realize the world. Now, there are two such standpoints: the one, that of external observation and description, occupied by natural science; the other, that of the internal agency of consciousness in its central effort to realize the world. This standpoint is not occupied by natural science and is open to metaphysics. The proposition here is that *it shall be occupied by metaphysics definitely and finally* as supplying the only cure for the demoralizing uncertainty of which we have spoken. Let the metaphysician make up his mind once and for all that his true standpoint is that of the central agency of conscious-

ness itself and he will find himself again breathing the bracing air of confidence and certitude. Again, the doctrine of the reality of consciousness carries with it the reality and validity of the method and categories of the process through which consciousness exercises its central agency. It is only necessary to consider what this deduction involves in order to realize its importance. What do we mean by the method and categories of this inner process? A little reflection will supply us with the answer. We have represented this movement as one of inner agency because it takes the form of an effort on the part of the subject of experience. It is not consciousness in any or all of its forms which relates itself to this effort. It is rather consciousness in a specific state of reference which we call selfhood. It is possible for consciousness to be related in various ways, some of them purely passive, to the objects which come within its limits, but it is only as a self and as a subject, therefore, that it can relate itself as an agent in a central effort of realization.

Now if we ask, further, what this self-agency (to connect our two terms) is, we answer that from its very form as effort or agency it will be primarily *volitional.* Consciousness first determines itself in a motive-form as will.[1] "Let us say, then, that the first determination of the inner consciousness is that of selfhood in the form of will; we then have our internal point of departure defined as will, and will has been further defined as our internal effort to realize our world. Now, without stopping for details, we immediately come to the point of asking two further questions: In the first place, how are we to suppose the other elements of consciousness to be related to this central effort of will? And secondly, how are we to define the form of the activity in which this effort proceeds to realize its world? The first question leads us

[1] The following paragraphs are quoted with several verbal alterations from my Presidential address delivered before the American Philosophical Association in Washington, D. C., Dec., 1902.

into the very heart of philosophy; for over against the modern Schopenhauerian insight, which is also the insight of modern psychology, and which defines the inner world as *will,* we have the more ancient insight of Plato that defines the inner world as *idea.* Shall we repudiate the older insight, and translate the heart of things into the pulsations of a purely motor force? Schopenhauer's experiment in this direction gave the real world over to blindness and unreason; whereas, the perennial complaint against Platonism is that its steps are too much in the clouds, and that it divorces its ideas too much from the world of ordinary experience and human interests; that its habit is to deny the reality of this ordinary world and lose itself in dreams and unreal abstractions. Without stopping, however, to debate the issue between Platonism and the modern doctrine of will, I propose here to claim for metaphysics the right to avoid partisanship by seeking a synthesis that will be just to both the ancient and modern insights.[1] While it is no doubt true that idea without will is powerless, and that will without idea is blind, yet if we include the two terms in a real synthesis we thus arrive at the notion of the idea as informed with motor energy; or, approaching it from the opposite pole, we arrive at the notion of will or motor energy as informed with ideal insight.[1] Let us, then, apply to this ideo-dynamic conception the name reason; we shall have in reason, which from one point of view is will, while from another it is idea, the central pulse of the inner being of the world.

"If this conception of reason and the relation to it of will be admitted, then I for one am ready to fall in with the emphasis which modern philosophy has placed on will, since, on the one hand, it indicates a healthy reaction against the one-sided intellectualism of ancient idealism, while on the other, its relation to reason preserves it from

[1] We reach a conception here analogous to the "idée forces" of Fouillée.

blindness and translates it into a principle of intelligent prevision rather than one of caprice.

"This leads to the second question, namely: How are we to define the form of activity in which this function we call reason or will relates itself to the world? Are we to regard it as primarily non-selective and mechanical, so that without ado it can be translated into terms of matter and motion acting under forms of space and time? Or, shall we regard it as teleological, as motived by intention and as determined in its direction by some definitely representable end? On this question, while I feel sure that we cannot choose the mechanical alternative, yet I confess to a measure of recoil from the easy teleology that sometimes passes for profound philosophy. The movement of will must, I think, as a whole, be regarded as selective, but there is a first stage of what we may call spontaneity in will-effort, that is not clearly teleological. This spontaneity is selective, it is true, but the 'select'—if the term be allowed—is come upon, so far as we can see, without prior intention, just as the young chick first comes upon food that is palatable. The selectiveness in this case, as in all cases of spontaneity, is due to some original property of the consciousness that puts forth the effort. (In the chick's case, the selectiveness is to be found in an original sensitive property of its palate.) But, after the first step, the movement tends to become selective in the ordinary teleological sense; or, to state the case in terms that will further our philosophical aim, will-effort after the first stage, in which it is subjectively selective, tends to become objectively selective and teleological. And it tends to become so because of the implicit rationality from which will is inseparable in its foundations.

"We have contended that the notion of reason involves a synthesis of idea and will, and this enables us here to translate spontaneous selectiveness into terms of primary conscious quality, while, in regard to the later stages of the will-activity, it is clear that it has become informed with

the idea in a definitely directive form, and is end-seeking, therefore, in the full objective sense. To this whole activity, in view of its subjective and spontaneous aspect, as well as in its more objective and teleological phase, we may well apply the term 'purposive,' understanding, of course, that this term is used broadly so as to include the sphere of spontaneous selectiveness along with that which is more deliberate. It thus becomes possible to define the method of metaphysics in terms of the fundamental concepts that determine the character of its procedure. And we can say, in view of conclusions already reached, that, whereas a mechanical method like that of natural science may be defined as one that generalizes its phenomena under the forms of space, time, matter, or cause, and reduces them to statements called laws which do not directly imply either reason or purpose in the world; the method which we call metaphysical, on the contrary, taking its departure from the heart of consciousness itself and seeking to construe things in the light of the central effort of consciousness, attains as its final result an interpretation of the world that reduces it directly to terms of reason and purpose."

We thus reach the conception of the two methods and points of view from which consciousness may proceed in its effort to realize its world. The one which science pursues is more external and descriptive; it excludes purpose and finality and adheres to the Baconian principle and categories of natural causation. The other, which we have here attempted to vindicate and define for metaphysical use, is more internal and, as Royce would say, more appreciative, and founds directly on design and purpose, committing its fortunes to the teleological categories of finality.

To return, then, to the point from which this long discussion set out, we proposed to show how the synthetic task of philosophy arises out of a real situation, and is, therefore, vital and pressing. We regard the demonstration of this as now complete, and what it proves is more than a transient need. The whole requirement of knowl-

edge is one that neither method can fully meet. Natural science, acting under definite categories, can fill certain measures of truth. But others equally vital are left empty. Metaphysics, following another set of categories, fills other measures and its results cannot be dispensed with. But the attempt of either discipline to ignore the other, or to proceed without regard to its results, is foredoomed to failure and ultimately to the sceptical eclipse of knowledge. Philosophy must perform its mediating office by supplying a synthesis which will organize the results of both natural science and metaphysics. And in order to be genuinely synthetic in its vision as well as in its aim, it must have passed through the Copernican revolution and come to the realization of the fact that consciousness itself is the great reality, that it constitutes the orders of both science and metaphysics, and that the unity of truth to which both aspire will be attained through the application of its own highest principle. Through its synthetic vision, philosophy thus becomes a discipline of the whole, and it is this vision which guides it through the mazes of difference and plurality to which it is not blind or irresponsive, to its own proper goal, the unity of truth.

Moreover, it lies well within the main purpose of the discussions which follow to show that the synthesis of philosophy only completes itself when it has vindicated and included in its scheme of certitude those judgments of belief which spring out of fundamental moral and religious grounds. Neither science nor philosophy will be in a healthy state so long as those beliefs which embody the deeper convictions of humanity are left outside of the pale of knowledge, a prey to scepticism. That theoretic certitude must be complemented by faith, and that man has a chartered right to certainty as to God and his own freedom and immortality, is a proposition the justification of which is an important part of the main business of philosophy. The following discussions will make clear, we think, that when reason asserts its full prerogative, not

only as a theoretic faculty, but also as will, it is able to emancipate man from the scepticisms of partisan thinking and direct him in the path of the realization of the highest ideals of his nature.

PART I

ANALYSIS

CHAPTER I.

CONSCIOUSNESS AS KNOWER.

MAN is related to the world and to himself through consciousness. It is only as he becomes conscious of them that things exist for him upon which he can react and construct his system of reality. This will remain true whether we hold with Hume that the originals of all our conscious activities are sensations, or, with Kant, supplement these with certain ideas of pure reason. Whether we be idealists or realists, empiricists or rationalists, sensationalists or transcendentalists, there will be but the one road for each of us to the apprehension of things, and that will be the way of conscious effort. Let us stop, then, and consider this thing we call conscious effort. What is it to be conscious? How shall we define consciousness? It is indefinable. We may describe consciousness and tell what it does, and how it acts, but in order to say what it *is* we must have terms simpler and more ultimate than itself. And this is impossible from the very fact that it is only in consciousness that anything is realized at all. Let us concede, then, that in consciousness we have something which is ultimate and indefinable. Shall we conclude from this that consciousness is unknowable? This would follow if we could say, first, that consciousness is indefinable and, secondly, that it is not ourselves, but something which is alien to us. But we cannot go so far, for while consciousness may defy definition and even description, it is yet of the substance of ourselves, and

we who know, know by virtue of being identical with a portion of the consciousness that knows. Instead, then, of being shut up to the conclusion that consciousness being indefinable is unknowable, there is another alternative, and it is open to us to say that while consciousness may not be able to define itself as object, it knows itself as subject, by a self-knowledge which is immediate and exclusive of the mediation of objective categories.

There is, then, a form of knowledge which we call self-knowledge and this knowledge is immediate. It is that form of knowledge in which being becomes aware of itself in its effort to know the world. We call the knowledge which is arrived at through the agency of descriptive or defining terms, mediate, while to the awareness of self we apply the term immediate because it involves no such act of mediation. What we say here may be put in different words. When we describe or define we use terms already known, to characterize what is unknown or less known. Describing or defining thus depends on the existence in consciousness of fields of experience which are already better known than the field we are seeking to determine. And the process which we have called mediate consists in employing the forms of the better known, to define or describe the matter of the less known. There is, therefore, a vicarious, substitutionary aspect to all such knowledge. But accompanying and underlying this process is the one we have called immediate, that awareness of self by virtue of which consciousness possesses itself of the fact of its own identity with the subject of the knowing activity. To say that consciousness may know anything, and yet be in this fundamental sense unknown to itself is to utter nonsense that is excusable only on the ground that the distinction between mediate and immediate apprehension has been overlooked. Conscious activity always involves a synthesis of the two moments, self-awareness and the definition of objective content, and the attempt to separate them reduces the business of knowing to an abstraction.

Another heresy must be refuted here. It is possible to distinguish the cognitive, knowing activity, from other forms of conscious realization, but it is not possible to separate them so that they shall be in fact distinct. There is no original impulse to know in consciousness, but the conscious agent is at first impelled to acts of realization with a view to the satisfaction of its wants and desires. Originally, consciousness is the organ of certain primary reactions which we call feelings, emotions, desires, and these stimulate the motor-consciousness to those acts of will which lead to their satisfaction. This *emoto-volitional* activity supplies the form in which consciousness first seeks to realize the world. It would be a prime heresy for us to suppose, however, that any process of conscious realization can be wholly lacking in cognitive elements. In fact, while it is true, as we have said, that the cognitive is not an original impulse of consciousness, it is certainly an original potence which the machinery of feeling and will immediately stimulate into activity. Blind feeling or will could take but a single step without the guidance of cognition. The very first movement of consciousness in any direction will develop a fragment of representation, a ray of insight, which will guide the following movement. And this cognitive guidance will present, in germ at least, the two aspects alluded to above; consciousness will have developed a fragment of objective definition and it will have caught some little glint of awareness of itself. In short it will have made a start in that effort to realize the things of the world and itself, which we call knowledge; or, more broadly, experience.

The effort to know is not, then, an absolutely primal impulse of consciousness toward self-satisfaction in its world. But though secondary in its rise it is yet primary and underivative in its character. The knowledge-activity is *sui generis* and may not be resolved into terms of feeling or volition. Albeit, it is inseparably bound up with these and without them would be a bloodless abstraction. Yet we

must not carry the notion of dependence so far as to convey the implication of any kind or degree of inferiority. Cognition, once aroused, stands in its own right. It is true that in relation to the emoto-volitional activity it is the eye which guides the process and does not supply the original motives. From this a plea might be drawn for the absolute subordination of knowledge to practice. But there is another side, which has been hidden from many of the wise and prudent, and only becomes clear when we get possession of the fact that from another point of view the whole emoto-volitional process is a caterer to knowledge. The truth is, the whole of a man's battle with the world in order to draw from it the means of satisfying his wants is also a process of realization by means of which he penetrates into and knows the world, including himself. The relation of the life struggle to the struggle for knowledge is neither one of exclusion nor subordination, but one rather of inclusion; for just as truly as cognition contributes to the life struggle, so is the life struggle itself tributary to knowledge. When, therefore, we deal with the activity of knowledge and the effort of man's intelligence to penetrate and realize the world, we are not concerning ourselves with a fragment of his consciousness or with a fragmentary activity, but rather with the whole activity of his consciousness directed as a whole to the realization of a specific end.

When consciousness becomes the organ of knowledge it gradually grows aware of two points of view from which it is possible for it to seek an acquaintance with its world. We shall call these points of view the *external* and the *internal*. These may be distinguished in various ways. The external may be represented as objective, the internal as subjective, and there is a sense in which this distinction will be helpful. Again, it may be said with truth that the external is the standpoint of observation and description, while the internal is that of appreciation. Let us attempt to define these points of view in respect of the attitude which the knowing subject is led to take toward

consciousness itself, according as he occupies one or the other. From what we call the external point of view, consciousness will be treated as simply a factor in a world which possesses other factors. In relation to these other factors, consciousness will have no advantage, if, indeed, it be not assigned a subordinate place. The standpoint of the knower will be outside of the matter observed. There will be no presumption of any community of nature between knower and object. But the phenomena even of consciousness itself will be observed, generalized and defined, just as are the phenomena of any extra-conscious physical agent. From the external point of view, the only way of knowing is through observing and describing the movements, the behavior of things, and there can be no question of knowing the inner nature of things. This type of knowledge can only formulate outer movements of things and may never find itself in a position where it can say that its formulations give any real insight into their nature. To say this, however, is not to condemn knowledge of this type. It is, rather, to define the type and bring out its strength as well as its weakness. The strength of this type consists in the fact that its terms are facts which are observable, and therefore describable. Its generalizations are open to tests which are definite, and its results may be clearly and accurately defined. Now, if we conceive consciousness as becoming the subject of this external function, this particular way of looking at the world in which things become things in themselves, with a nature that is hidden from view, and, for aught the observer knows to the contrary, altogether alien to his own nature; we shall have conceived the ordinary standpoint of science. For consciousness as an organ of scientific observation and reflection stands outside of the world of science which it contemplates as a system of things in themselves which do not reveal their inner nature in their manifestations, or supply any analogies to the investigating consciousness by virtue of which this inner nature may be indirectly approached. As an

external observer of the world, consciousness finds as its sole available data the outer movements or behavior in space and time, of the things which in themselves lie hidden from view. This behavior presents itself in the first instance as an unorganized multitude, a chaotic and unrelated heap of happenings and movements. Hume's sensorium, in which the sense-atoms appear without any real connections, will serve as a good analogy for the world of phenomena as science finds it. Of course science approaches a world which has already been organized in a crude way by common sense. But the first step of science consists in setting aside, provisionally at least, this order of common sense and attempting the work of construction *de novo*. Science then sets out from a world of disconnected, and therefore meaningless, happenings, and its aim is to seek in this mutacious sea of particulars for points of uniformity and points of stability. In a world of plurality and change, only the uniform and stable will be able to satisfy the concept of order for which science is looking.

We may ask, then, how science proceeds to realize its aim. By seizing on those existential-points in the sea of change which recur again and again. The first form of identity, and in fact the first form of order, in science, is simple *recurrence;* the fact that some phenomena repeat themselves. And these repetitions breed in consciousness the *expectation* of recurrence, and this expectation finds an answering response in a tendency to regularity in the objective world. Hidden as are the natures of things, they yet show a disposition to behave themselves in an orderly way. These points of recurrence are seized upon by science, and, by means of its abstracting and generalizing activities, translated into propositions which are taken as true, not for any single point in the phenomenal world, but for the mass of phenomena as a whole. For, abstraction and generalization proceed on the sublime assurance that the recurrent fact, say, of heat expanding substances, which characterizes this little eddy of phenomena to which

the range of our observation has been limited, is a sufficient guarantee for the sweeping proposition which throws off all limits and affirms that anywhere in the broad ocean of happenings it will be found to be true that heat will expand substances. But science discovers at a very early stage in its progress that a presumption with which it started out; namely, that of the equal value for knowledge of all the elements of experience, must be given up, or at least very seriously modified. The Humian essays to carry this presumption through, but finds that his terms will persist in asserting for themselves different empirical values. For example, the problem of the outer movements of things is not simply one of recurrence, but it is found that outer movements in whatever order and how frequently soever they may recur, all come bearing one common character; they are phenomena in *space*. And it is found that while in all other respects these phenomena never escape wholly from the taint of particularity and that the propositions founded on them must forever remain open to revision, yet here in space we have come upon a phenomenon which will bear out propositions that are absolutely sure-sighted and universal. Space may be regarded, then, as something unique, not as a thing in itself necessarily, but as a point of absolute uniformity in the sea of objective phenomena.

Again, if we translate our phenomena into terms of events it will be found that these do not in all respects maintain equal values. For, while the prediction of events which rests on the uniformity of recurrence will always be affected with contingency—if we may use a term which simply means liable to disappoint expectations—yet there is one aspect of the world of events which rises above contingency, just as space rises above it in the sphere of outer movements. That aspect is what we call the order of events regarded as an order of changes. The notion of change is that of transition from one state to another, and this transition gives rise tc what we call a series, the

terms of which may or may not be recurrent. Taking the series of changes as thus indifferent to the character of any particular member of the series, we call the form of this series, that is, the form of change as such, *time;* and it is found that while all other propositions founded on change are contingent, yet, in the single instance of time, we have a phenomenon on which universal and non-contingent propositions may be founded. We say in view of this aspect of events, that however fragmentary and broken their recurrence may be, yet events shall appear in the dress of time. This is something that may be predicted with absolute assurance.

Now, if we seek the net outcome of our investigation so far, we shall find it, I think, in three leading conceptions. Taking the phenomenal world as science finds it at the beginning of its enterprise, what it represents is a plurality of unanalyzed existential points, which in ordinary experience we have learned to regard as things or objects. The obtrusive quality which characterizes these as a whole is their plurality. It is a world of maniness; a countable world, but not yet. Science must achieve its notions of space and time; space as the uncontingent form of outer movement, with its dimensional continuity; and time, as the uncontingent form of serial change, with its non-dimensional discreteness. It will then be in a position to develop from its categories of plurality, space and time, the concept of *number* and the method of dealing with the phenomenal world to which we apply the name mathematical, a method which, abstracting from quality, and thereby also, from contingency, aims to define its world in the strictly determinate and exact terms of quantity.

But the mathematical aim, howsoever completely it may be realized, will fail to satisfy two very profound instincts of the scientific consciousness. The first of these is an instinct for the grounding of uniformities, and the second is an instinct for the stability of the world. The first expresses itself in the demand for *causes;* that is, for

those dynamic antecedents of things or events which, when supplied, will answer the question, how or why these events came to occupy the place they hold in the order of the world's phenomena. True, it is said that the tendency of modern physics is away from the notion of causation which implies capacity in one thing to affect another, toward a notion of relational equivalence which can be determined with greater mathematical precision. But however the notion may be defecated of quality, there will always survive as the indefectible minimum of the notion of causality, the presumption that when the real causes of any phenomenon have been ascertained the *rationale* of the position which that phenomenon holds in the world-order has also been determined in a manner that satisfies the instinct of the scientific consciousness. Now, the notion of cause, like those of space and time, when once achieved enables science, in the wide field of its application, to escape the clutches of contingency in propositions which express what is universal and necessary. Hume thought he had destroyed the rational necessity of cause when he had reduced it to a mere uniform time relation; having first attempted to empty time itself of the non-contingent. But we have found that the notion of cause which can alone satisfy science, is one that conceives it as the universal symbol of dynamic relation. In a world made up of a plurality of things or existential points, if these are to be conceived as capable of any sort of mutual influence, the principle of conditionality or dynamic dependence must pervade the whole. To this principle when abstracted from all other qualities, the name *cause* is given. Causality then becomes a universal and non-contingent aspect of the world.

It would perhaps create a scandal were we to say that some notion of *substance* is essential to science. But this is true. We are not speaking here of that presumption of *things in themselves* on which science rests. We refer rather to its demand for the stability of its elements. How does this express itself? The idea of substance, when

boiled down, is that of persistent points in our world for the repetition of happenings or for the reinstatement of experiences. Whatever the substance of that tree out in the campus may be in itself, it represents to me a persistent point in reality where I may be assured of a repetition and reinstatement of a certain kind of experience. To this experience as a whole I apply the name tree and *the substance of the tree is that in reality, by virtue of which the possibility of this reinstatement remains a persistent fact.* Now the scientific consciousness makes just this identical demand on the world. The notion of cause determines only the *rationale* of position but does not ground persistence. This can be grounded only in conditions which are stable, a requirement that is only partly, not fully, met by Mill's permanent causes. For science wants to be assured of permanence itself, and it will not feel secure regarding the stability of the world until it has achieved a notion which will enable it to incorporate permanence into the very constitution of phenomena. This is achieved in its notion of *matter.* For however much modern science may be disposed to do despite to matter, it cannot get on without it. And just as we saw in the instance of causation, that there is a concept of cause which is fundamental to science, so here, if we concede that motion is not an ultimate concept, but has a necessary presupposition, then matter comes in as that presupposition. We may translate the notion of matter from that of the traditional atom into that of force; or we may resolve it into some spring of electrical disturbance; there still remains the presumption that some stable element is needed to supply a basis and medium for the movements and changes of the world. Let us apply the name *matter* to this necessary substratum; or, risking a scandal, let us call it *substance.* The scientific consciousness, then, has need of substance to guarantee the stability of its world-order. Without its category of substance, it would have no adequate *rationale* for the fact that the world persists and that the drama of

its movements and changes is played in a stable medium which guarantees its uniformity and order.

Let us go back now and fix our bearings. We have pointed out that one of the modes by which consciousness seeks to know the world is that of external observation; that from this point of view the world is an object whose inner nature is hidden from the observer, and that the whole function of the investigation is to spell out the laws of things from their ascertainable movements. In our effort to describe the operation of this method we have seen how the purely empirical activity of abstraction and generalization of phenomena has become qualified and transformed by the rise in connection with the phenomenal world as a whole, of certain universal aspects or categories, which supply the basis of non-contingent and universal judgments in which the *rationale* of the whole field of phenomena is expressed. Following this trail we have seen how the rational demand of science has been successively met and satisfied by the categories of space, time, cause and substance: the latter, as will be made clear later, supplying the rational point of transition from the interpretation of science to one that is founded on an insight which is metaphysical.

We moderns are in danger of forgetting that there is another point of view from which an effort to realize the world may be put forth by a conscious being. This danger has arisen from the attempt we have been making from the very outset of our modern thinking to abstract the knowledge-process too absolutely from other forms of conscious activity. Bacon is to blame, perhaps, for part of this result, though most of the mischief has arisen, no doubt, from a too literal interpretation of his precepts. If we name the point of view we have just developed, that of natural science, it is certain that Bacon did not regard natural science as completely exhaustive of the whole field of knowledge. It is certain that in distributing the search for causes in the spirit of Aristotle, he allotted to

natural science the material and efficient which together might stand for the physical conditions of a thing, while reserving for a discipline, to which he applied the traditional title metaphysics, the formal and final, which, taken together, might be termed the principle of the non-material or spiritual explanation of things. Bacon regarded metaphysics, which deals with the formal and final causes of the world, as the queen of the sciences, thus including it in his scheme of knowledge. It is not the purpose here to argue, however, but to define as clearly as possible the point of view to which we have already applied the name internal. We have also called it the metaphysical and have thereby ruined it, possibly, in the opinion of a great many people. But let us seek to define it without prejudice. It is possible for a conscious being, pursuant of his purpose to know the world, either to approach that world after the manner of natural science as we have described; or, by taking a more internal standpoint within consciousness, to identify himself with the central effort which consciousness puts forth in order to reduce the world to terms of realized experience.

Now, we have seen that the standpoint of natural science is one from which consciousness is not regarded as a central agent, but rather as a phenomenon among phenomena, to be dealt with in the same objective and external way in which all other phenomena are treated. In natural science consciousness must even submit to a kind of subordination to the physical. The physical fact is a phenomenon or movement in which the nature of things gives itself a first-hand utterance, whereas the fact of consciousness is an epi-phenomenon, a secondary and collateral expression of this nature of things. From the point of view called metaphysical, the order of values is reversed and consciousness becomes central and dominant in the world. The inner point of view is that of internal agency from which the whole effort of consciousness proceeds and in relation to which the whole object is to be regarded as possible content of experience. We have seen

that the primal impulse of a conscious being is emoto-volitional rather than cognitive; it is that activity in which consciousness seeks to realize its world in terms of reality, and, therefore, in the last analysis, in terms of itself. Consciousness will therefore assert its own primacy in the world and will insist that its interpretations shall be made under the rubrics of conscious activity itself. It is here that we come upon a most fundamental distinction between the reflective points of view of natural science and metaphysics. From the former, consciousness is but a circumstance in the world and not one of first-rate importance, but of value secondary to the physical. Natural science will not permit consciousness to dictate its own terms to the object, but on the contrary subordinates it to the terms of the objective. This is seen in its favorite way of dealing with psychic phenomena. A fact of consciousness can obtain full vested rights in natural science only when it is bound to a physical fact which becomes sponsor for its behavior. Only in this psycho-physical relation can conscious phenomena achieve full scientific standing. But the metaphysical world is the world of consciousness itself. Consciousness here becomes primate, and the physical only achieves full metaphysical dignity when it is able to trace its lineage from mind. We might define the attitude of natural science as that of indifference to consciousness, while that of metaphysics is identical with the attitude which consciousness takes toward the world in its effort to realize it. In one case consciousness is a circumstance; in the other the very heart of the world itself.

Let us see, then, how the internal method works out and how it leads to a view of the world differing from that of natural science. When a physical object acts, we infer that it has been set in motion by the impact of some other object. We do not ascribe its action to any inner impulse, but say, in popular language, that motion has been communicated to it by the impact of another body. And we are confirmed in this by finding that the other body has

lost a quantity of motion equal to that which the first has gained. It is a phenomenon of transference through impact. If, however, it is a conscious object which moves, this form of explanation no longer suffices. The conscious object has an inner nature, which we call impulse, that is not communicable from object to object, but holds in it the initiative of conscious activity. The outer, observable phenomenon will be very much the same as in the other instance. There will be some kind of external stimulus through impact or otherwise, and this stimulus will give rise to movement in the conscious body. But a difference will arise in the fact that we cannot now predict with certainty the kind or the quantity of the resulting action. It is not now a simple matter of transference, but we call it response, reaction. And when we connect the phenomena with their internal impulse, the stimulation takes on the character of inducement, while the initiative of motion finds its place in the conscious impulse which becomes active in view of the stimulation which it regards, or learns to regard, as a satisfying or non-satisfying object. In this case, then, the real initiative is taken away from the object and is assumed by consciousness, and the movement which arises is one of conscious reaction upon some feature of the objective world with a view to appropriating it and reducing it to some form of realized content.

This may serve as a typical instance of the mode in which the emoto-volitional consciousness reacts upon its world. The causal antecedent of the physical world becomes the inducing end of the mental world. The real initiative is transferred from the physical cause to what would be called the effect, were the transaction strictly one of the physical world; to the conscious impulse itself whose reaction is simply a making for that which it desires, or from that which it hates and repugnates. Taking this instance as typical we see how from this inner point of view the whole world becomes food for consciousness, and its possible content. The objective world stands related to

the conscious activity as desired end and as realizable content. It is a doctrine of modern psychology, for which James is one of the leading sponsors, that the characteristic movement of consciousness is end-seeking; that wherever you find the least fragment of consciousness, it tends to roll itself up in a ball, so to speak, and to aim at something. This we contend for here. What distinguishes conscious movement fundamentally from physical movement is its *end-seeking form,* its teleological rather than mechanical character. This may be taken, then, as the first and most fundamental determination of the way in which consciousness moving internally reacts upon its world.

It will be seen, then, that metaphysics finds its ground-form and motive in the activity of the emoto-volitional consciousness. We do not mean to say, however, that metaphysics is purely an affair of emotion and will. What we are really aiming at is something much more profound. We have seen how in general the practical effort to master the world gives rise to a cognitive activity which becomes the directive agency of the whole movement. Science thus originates from a practical motive, although itself a theoretic activity. In like manner the emoto-volitional effort of the inner consciousness holds in it from the outset a cognitive potency which soon develops into theoretic form. Natural science, arising as a mode of pure objective description and definition, naturally develops a form of activity that is indifferent to the conscious subject and conforms to the type of objective movement. It is mechanical rather than teleological. But metaphysics has its vital roots in the form and substance of the emoto-volitional nature of consciousness. In its mode, therefore, it conforms to the type of subject-movement rather than to that of objective movement. Its form will thus be end-seeking or teleological and its whole construction of the world of objectivity will take the form of an effort to bring it under the categories of teleological finality. Let us seek, then,

to determine some of the categories of the metaphysical process. Starting with the fact that the form of activity with which metaphysics deals is teleological rather than mechanical, we may proceed both progressively and regressively from it as a starting-point. We must connect end-seeking with the quality of consciousness of which James has spoken; that is, with its inveterate tendency (necessity would not be too strong) to roll itself up in a ball; or, in short, to constitute itself a *bona fide* self. Selfhood seems to be of the essence of consciousness just as thinghood is of the essence of the physical world. It is clear that there can be no end-seeking movement where there is not at least a rudimentary self. It is inconceivable that anything lacking the fundamental qualities of selfhood should become a bearer of consciously sought ends. Moving toward an end from the initiative of an inner impulse is just the way of expressing the characteristic movement of a self. Nothing but a self is capable of such action, and when this is abstracted from consciousness, the substance of self seems also to have disappeared.

If we connect the teleological form of conscious activity with self as its subject or bearer, the form of activity we have described becomes the characteristic way in which a self reacts upon the world in order to realize it, and the categories which arise to define the result as a whole will be the great interpretative norms which express to us the metaphysical meaning of the world. Natural science, as we saw, construes its phenomenal world under the categories of space, time, cause and substance, and the mode by which changes are produced and propagated is that of physical causation, outer impact and transference. In all this any ideal of order or rationality which may be involved will come out at the end as a result, and will not be observed in the beginning of the process. Metaphysics, on the contrary, is committed from the start to the form of end-seeking in which the objective, inducing term is some ideal to be realized. So long as this ideal stands simply as an

aim for the satisfaction of the emoto-volitional subject it will have little real metaphysical significance apart from the teleological form of activity which it supplies. The real germ of the metaphysical construction of the world arises when the conscious self begins to reflect on this form of activity and derives from it the principles of world-explanation. Let us ask, then, how reflection proceeds to derive these principles? In the first place we saw that natural science adopts physical causation as the principle by which changes are produced and propagated in the physical world. Metaphysically the principle which corresponds to this is end-seeking or finality. Now finality, when connected with the emoto-volitional activity of self, becomes the principle of the intentional realization of ends. To this form of activity Royce has applied the terms *purpose* and *purposive*, and we adopt his phraseology here. Let us say, then, that the intention in which a conscious self directs its activity to the realization of an ideal end is a *purpose*, and that all such activity is fundamentally purposive in its character. Purpose will then stand as the metaphysical correspondent of physical cause, and metaphysical results will be purposively determined rather than determined by physical causation.

Having found in purpose the metaphysical equivalent of physical causation, where shall we seek for data which will enable us to universalize our category into a principle of world-explanation? Natural science finds the ground of its universalization of cause in the notion of uniform and stable forces of which the phenomena are conceived to be effects. Without this assurance the extension of cause beyond a few particular instances would be precarious. But the notion of a uniform and stable nature supplies a point of view from which the analogies of physical causation may be translated into the certitudes of science. Where, then, in the field of metaphysical explanation shall we find the equivalent of this fundamental faith of science? What, we may ask as a

preliminary question, is the real significance of this presumption of natural science? for that it is a presumption and not a provable proposition, will be conceded. The answer is clear. Science must presume the *rationality* of the world before it can have any assurance of its stability. We do not mean to say that science postulates any actual reason in the world, but it must and does assume that the movements of the world will be reasonable in the sense of being uniform and stable, while of this uniformity and stability no proof is possible. Now, a like situation is encountered in dealing with the issues of metaphysics. Here the equivalent of the principle of natural causation is purpose. Purpose embodies the form of final agency. But the purposes of the world, like its physical movements, require to be universalized. Metaphysics rationalizes the world by presuming the uniformity and stability of the purposive agency of the world. But it can only achieve this in making the ultimate purpose of the world all-comprehending by inducing this purpose with a *thought* that grasps the whole of the real in an act of prevision.

Applying the terms physical and metaphysical to the two points of view from which consciousness seeks to know and realize the world, let us consider in a paragraph the relation of these two points of view. It is claimed sometimes that the standpoint of natural science is exhaustive of knowledge and metaphysics is denounced as a dream. On the other hand, it is not without precedent that extravagant claims have been made for metaphysics. The metaphysician may go so far as to deny the reality of the whole aspect of the world in which natural science is interested. It would seem more rational, however, to ask whether either point of view, taken abstractly, can be exhaustive of knowledge; whether, in truth, both points of view may not require to be occupied in order to fill up the measure of knowledge. What is it that leads science on in its everlasting quest of knowledge? Well, it is largely a

practical demand. Man finds that he needs more knowledge in order to attain his good. But beyond this he demands the rationality of the world, and this he gathers up in a great presumption which serves as the ground-work of science as a whole. There could be no stable science in an irrational world. What, again, is it that actuates man in his everlasting quest for the metaphysical significance of the world? Partly, no doubt, the pressure of his higher moral and spiritual wants. In relation to the highest good the problems of God and immortality are momentous. But beyond this pressure there is the demand for the supreme rationality of the world. This becomes metaphysically necessary just as the same demand on a lower plane has become scientifically necessary. This rational demand leads to the completion of the metaphysical task. Have we not need of both the physical and the metaphysical instruments in order to fill out the measure of knowledge? Our answer to this question will depend on our conception of the nature of knowledge and its relation to the knowing subject. It is said that knowledge is acquaintance with fact, and this is true as far as it goes. But it is only the beginning. Knowledge is the understanding of fact, the fixing of its place in some system of reality, the determination of its meaning as a part of this system. That is the *what* of knowledge. But why should this understanding of fact be necessary? The fact makes no demand. The *object* does not need knowledge. It is the *subject* that makes the demand,—that needs knowledge. For any knowledge beyond the mere acquaintance with fact, the final cause is a demand of the subject, and this demand will arise either as a means of satisfying some clamoring wants of the subject on the practical side, or some theoretic need of the subject. Let us trace briefly the rise of these requirements. Science originated historically in scraps and in obedience to particular practical needs. These scraps, at first isolated from one another but not from the life of man, through an organizing instinct of

man's consciousness were brought together into relations of coherency so that they began to take the form of systems of truth. Finally, these organized truths, resting as yet on empirical grounds, were translated to rational grounds through an instinct of man's consciousness which leads him to seek; not simply to observe and organize, but to understand the truths of his system. We find, then, that science, starting with the effort to satisfy detached practical needs, very soon transcends this plane and begins to organize the fragments in obedience to a demand for *unity*. And, finally, science not only requires the organization of its elements into the unity of a system, but it demands to know the reasons for their uniform and stable occupancy of the place to which they have been assigned in the system. We have, then, as the determining end-motives of science, standing in the order of their rise and development, the clamor of detached practical demands, the further demand for unitary system and the demand for the *rationale* of the parts of this system. In this process the object, considered as distinct from the subject, supplies simply the plurality of facts or existential points, while the whole requirement of generalization, organization and rationalization is directly rooted in the nature of the conscious subject. It is, then, the nature of the conscious subject, and not that of the object investigated, which determines the rise and development of knowledge.

This being the case, we are in a position to ask the further question, whether the subject's whole demand for knowledge, so far as that demand is legitimate, can be satisfied by natural science. In order to answer this question we have first to decide whether the whole demand for knowledge be satisfied with even a rational construction of the movements or behavior of things while the things themselves in their own inner nature remain hidden from us. In the first place, Why should we not rest satisfied with natural science and the instrument it supplies to us for the satisfaction of our practical and theoretic wants?

The answer is twofold. The conscious subject has an *inner* nature of which it is immediately conscious, and this nature stands related as grounding-principle to the phenomena of its conscious world. We have seen that the standpoint of metaphysics is that of the inner nature of the conscious subject, and that its central motive is the effort of consciousness itself to overcome and realize its world. Naturally, then, a theoretic demand which arose from this source would be for a more than phenomenal knowledge of its object; in short, it would be a demand for some insight into the inner nature of its object. Again, this demand for a knowledge of the inner nature of things would not be formless and empty-handed. The form it would take would be that of a search by the subject-nature for a *kindred nature* in the object. In the last analysis, the subject-nature of which the knower is conscious cannot tolerate the idea of an alien nature in the object. It seeks itself in its world, and it comes to this search armed with certain analogies of its own nature which supply it with its leading categories of interpretation.

Now, the truth of this may be recognized and still the procedure of metaphysics may be stigmatized as vain and empty speculation. In view of this let us consider the real motive of metaphysics, which is, in the first instance, simply the pressure of certain great wants of our being. Let us call the inner nature of which we are conscious, spiritual, in order to distinguish it from the physical nature, which is the object of natural science. Now this spiritual nature utters itself in several great and characteristic needs. There is, first, the requirement of *freedom:* it requires to be assured that the inner nature of things whose outer movements obey the law of physical causation, shall not be alien to its own agency which is that of self-initiative and self-determination. Secondly, there is the problem of *destiny:* it requires to be assured that the inner nature of things which manifests itself in perishable phenomena shall not be hostile to its own perdurability

It could have no place in a world that is perishable at its heart. Finally, there is the question of God; it asks to be assured that at the foundation of the world there is an eternal being akin to itself in which its own life is rooted and its own ideal interests and destiny secured. These great problems of *freedom, immortality* and *God,* spring directly out of the soil of man's inner nature, and they can be dealt with, therefore, only as metaphysical issues. But the whole of the metaphysical requirement is not exhausted in these demands of the moral and spiritual nature. We have seen how natural science transcends the practical motive in which it originates and becomes the organ of theoretic necessity. This is also true of metaphysics. Starting out with the effort to satisfy moral and spiritual needs, it soon transcends these motives and becomes more and more a doctrine of reality. And its procedure here finds its analogies in the process of natural science. Its investigations up to this point may have been fragmentary, but it now begins to respond to the idea of unitary system, and, proceeding on the analogies of the spiritual rather than those of the material, develops its theory of an absolute as the unitary ground of reality. And, finally, in order to completely rationalize the system of being, it incorporates with this absolute its own spiritual selfhood as a stable and perdurable term in its theory of individuality.

We deem the above statement sufficient to prove not only that there is a normal demand for both natural science and metaphysics, but also that both are required to fill up the measure of that knowledge which man is prompted to seek. To determine the question of the *possibility* of such knowledge is, in a sense, the object of this entire inquiry.

CHAPTER II.

GROUND-PRINCIPLES.

We have found that the effort to know takes on the two forms which we have named natural science and metaphysics, and we have discovered also that both efforts are normal and stand in their own right. Here we are directly concerned with the knowing-process, and our aim is to discover and formulate the fundamental principles of its two main types. We saw in our analysis of the natural science-process in the last chapter that in connection with its empirical activity there arise certain categories or universals which enable it to reduce its body of truth to rational form. Now our quest for a fundamental principle will be along the line of these rational forms. The rational forms which emerged were space, time, cause and substance. And we saw that if we apply the concepts of space and time as supplying the norms of continuity and discreteness, to the unanalyzed plurality of the phenomenal world, there arise what are called the methods of pure quantitative determination. We shall find it necessary at this point to carry the analysis of these methods farther than was deemed necessary in the preceding chapter. The unanalyzed plurality of the phenomenal world contains in germ the notions of *whole and parts,* but it is necessary to apply to it the ideas of quantity developed in geometry and number in order to bring these notions into clearness. Without delaying here to analyze the processes

through which the mathematical consciousness comes to the clear apprehension of the notion of whole and parts, it will be sufficient to note the fact. The aspect of the phenomenal world on which the mathematical consciousness seizes is that which is expressed in the idea of a whole made up of the sum of its parts, a whole, therefore, which is exactly identical with the sum of its parts, and, on the other hand, the idea of a plurality of parts or units which, when combined, become exactly identical with the whole. Let us add to this, complete abstraction from differences of quality and what the mathematicians call commutativeness, that is, absolute indifference as to the position of any part in the order of parts, and we shall have fairly enough determined the aspect of the world with which mathematics deals and which it calls quantitative. Such a world will be characterized by the mutual indifference of its parts so far as quality is concerned, and by their ability to maintain themselves in all combinations and separations, unmodified as to their quantity. If, for example, x could change its value in the course of an operation, the solution of no problem in which x is involved would be possible. But the whole mathematical process depends on the existence of parts which possess defined and stable values, and its operations in general are reducible to the separation and combination of these parts and the determination of their equivalence.

Now, it is clear that wherever our world presents phenomena which can be depended on to maintain definite and stable values, the mathematical method supplies the form which the knowledge-process will normally assume. The questions we ask here, then, are: (1) What is the limit of this sphere of definite and stable values, and (2) What is the ground-principle of science in this field? The answer to the first question will be found by referring to the fact that the phenomena we are dealing with here are those of space and time. These may be called the forms in which the world presents itself immediately to our

sense-perceptions. It is in connection with space and time that the unanalyzed plurality of the world takes on the forms of dimensional continuity and serial discreteness, and thus grounds the distinctions of continuous and discrete quantity. This distinction which underlies the whole of mathematics will naturally determine the limit of its application. Wherever our phenomena are such that they can be reduced to terms of continuous or discrete quantity, that is, to terms of geometry or number, they will be amenable to the mathematical method; otherwise they will not. And inasmuch as space and time supply the forms which render the basal distinctions of mathematics possible, it follows that they also determine the limit of the application of its method to phenomena. We come, then, to the second question, What is the ground-principle of science in this field? We have to bear in mind here that mathematics deals with a world that is conceived under the notions of whole and parts. Its direct transactions are with the parts which it conceives as constituting the whole. Now, it is important here that we distinguish between a principle of procedure and a ground-principle which underlies the whole of procedure as its necessary presumption. It is the latter we are seeking here, but in order to find it we must pass through the former. The principle of procedure is clearly that of the quantitative equivalence of the parts with which the process deals. The whole efficacy of mathematical calculation depends on the general possibility of finding parts which may be used as exact measures of other parts, and its procedure in general will be found to be the application of these measure-units to the mass of phenomena, thus reducing them to a system of definite equivalents to which mathematical analysis and synthesis may be applied. The principle here indicated is that of the quantitative equivalence of parts and may be stated as follows: All the parts or phenomena dealt with in mathematics are capable of reduction to equivalents of terms with which the mathematician carries on his calculations, which terms

represent to him definite and stable values. If the law of equivalence be regarded as the law of the relation of the parts in a mathematical world, it may well be doubted whether there is any more fundamental article of mathematical faith than this. What has a mathematician to do further than with the parts of his world? We answer, that whether conscious of the fact or not, he has to do with his world as a whole. The *whole* of mathematics is the notion of a quantity which is equal to the sum of all its parts, and is not, therefore, a notion of comprehension or inclusion. It is not an organic relation in any sense, but simply one of equivalence or quantitative identity. The principle may be expressed in the formula $a=b$ in which a represents the whole and b the sum of all its parts. And the formula being one of exact equivalence will be true when stated in the reverse order $b=a$, which asserts that the sum of all the parts in any given system of phenomena is equal to the whole. In short, the ground-principle of mathematics is simply a formula which expresses the kind of world with which mathematics deals in its concepts and processes. It is a world that is made up of a plurality of definitely determinable parts the sum of which constitutes the whole, and the mathematical whole is simply a sum, the sum of all the parts and never anything more or less. Now, the highest rationality of the mathematical world will be expressed in the principle which connects its phenomena with the conception of a whole that is their ideal sum and equivalent.

But we have seen that the mathematical aspect of the world does not exhaust its whole meaning for science, and that there is a point where the mathematical presumption of the mutual indifference of the parts of the world to their order breaks down and we enter the field of a different kind of relation. This whole field may be represented as that of natural causation in which the presumption is one of dynamic influence, and the mutual interdependence of the parts of the world. We have already defined natural

cause as the principle that accounts for the position of any given phenomenon, a, in the phenomenal system to which it belongs. It presupposes, therefore, conditioning relations among the terms of which the world is made up, and rests on the conception of a system of *interdependent* parts. The mathematical world, as we saw, represents indifference to all this. There is no relation of part to part, or of parts to whole, presupposed, except that of quantitative equivalence; whereas, in the world of natural causation, quantitative equivalence is not directly involved. What is involved directly is *qualitative change*, and this takes place in a transaction which we call transference. For in the causal formula, $a \times b$, the b-term is a change or modification which appears as something new in the phenomenal series, something which the world was lacking until some influence, in or symbolized by, the phenomenon or group of phenomena which we call a, induced its appearance. Now, it is clear that this new phenomenon b could not be produced *in vacuo*, but must arise as a modification or modified form of some situation which already exists; and it is just as clear that if the phenomenon or group which we call a remained unchanged it could not account for the appearance of b. We shall come nearer to the truth, however, if we conceive the causal term as some change or modification which arises in a. Let us call this x; the effect b, on the other hand, will be better represented by some change or modification which arises in b and to which we may apply the symbol y. When, therefore, a is said to be the cause of b, what is really meant is that the connection between a and b is such that any change or modification x occurring in a gives rise to some change or modification y in b; and the whole result of the transaction is a system in which the interdependent terms a and b have given place to the modified terms ax, by, or, if we do not wish to express the specific nature of the change, a', b', and these will still continue in the relation of interdependence and therefore in that of causation, and may be expressed in our altered world by the formula

$a' \times b'$ which leads in like manner to $a'' \times b''$ and so on *ad infinitum*.

It is obvious that we have here the phenomenon of mutual influence, of parts of the world affecting the character or movements of other parts, and that, not after the manner of addition and subtraction which leaves its terms qualitatively unchanged, but rather, in a way which induces change of quality, or generation as well as change of quantity. For, were the change contemplated here simply one of quantity, it would be expressible in changes of position and combination, while the terms themselves would remain unmodified. But in a world of mutual influence this indifference no longer exists, and dynamic changes mean changes in the character of the terms themselves. They become different through modification of character, and this goes on incessantly so that our *a*, *b*, is constantly passing into *a'*, *b'*, and so on without end. The sphere of natural causation is thus one of qualitative change in which the characters of phenomena are subject to mutual alteration. The presumptions of indifference and exact equivalence of parts must then be given up, and we must search for other grounds on which the sciences of natural causation may found their procedure. We have seen that the security of mathematics arises out of the definiteness and stability of the terms which it uses in its calculations. Its *a*'s and *b*'s remain always *a*, *b*, unmodified and its world is the equivalent of a definite sum of these fixed quantities. In the world of natural causation everything is different; the phenomena with which science deals are changing while passing through her hands. A change in phenomenon *a* which translates it into *a'* is followed by a corresponding change in *b*, a related phenomenon which translates it into *b'*, and presto! the whole world is transformed. Furthermore, this is not an accident of the world of natural causation. It is rather its normal habit. For it is with the phenomenon of qualitative change, a world whose phenomena are incessantly changing their character, that the

sciences of natural causation, which I shall henceforth call the physical sciences, have to do, and it is for a reliable knowledge of such a world as this that those sciences must seek. Their problem is, therefore, in the nature of the case, less hopeful than that of mathematics. And its solution requires, if we may be permitted to say so, a much more extensive exercise of the speculative imagination. For the mathematician deals with definite equivalents which never change their values and his world-unity is the immediate achievement of the summation of parts. But the physical sciences deal with a world of incessant change which in its baldness defies knowledge and forces on these sciences the task of finding in, or in connection with, the mutable world some relative or absolute grounds of stability. We have already described the process of abstraction and generalization of recurrent terms by means of which relative stability is secured to the empirical process. And we have also followed that instinct of science which tends to the rational grounding of its empirical generalizations in its doctrine of matter which supplies the principle of absolute stability required. It is right here, however, in what has been termed "the bookkeeping of science" that the call arises for the exercise of that speculative imagination of which we spoke above. Metaphysically, it is an open question whether or not the reality of matter can be maintained. And the same is true regarding the faith of science in the uniformity of nature. If we are going to await the guarantee of absolute certitude regarding these things, then we must rest content without science; or at least with mere fragments which develop independently and without organic coherence. The phenomenal world does not supply an adequate basis for the physical sciences, because it does not fulfill the demand for stability on which the value of the knowledge-process depends. They are obliged, therefore, to go back of the presented phenomena of the world and to postulate another more fundamental system in which the demand for sta-

bility is satisfied. And the procedure of science here consists in regarding this more fundamental system the real world, of which the presented world is to be taken as the symbol. Having made its empirical generalizations of these symbols, science rationalizes its results by grounding them in a system of elements which secure their absolute uniformity and stability.

We are seeking here for a ground-principle of the sciences of natural causation which will be the correspondent in this sphere, of the ground-principle of mathematics. The ground-concept in mathematics, the one that expresses the kind of a world with which the mathematical process deals, is that of whole and parts, and for this we are seeking an equivalent in the field of natural causation. Now, in view of the fact that the physical sciences find it necessary, in order to secure the needed stability to the world, to connect its manifested phenomena with more fundamental elements which do not appear, are we not right in saying that the principle for which we are seeking is that of *ground and phenomenon?* Mathematics shows that the phenomenon can be dealt with scientifically if regard be confined to its quantitative character. But physical science finds that the quality of the phenomenon is subject to incessant change and this defeats its effort to reduce it to any form of reliable knowledge. This difficulty is only partially overcome by the discovery of uniform recurrences among phenomena. For we can never assure ourselves of these, and our world remains in the clutch of contingency. The only hope for these sciences lies in the postulate of a world of stable material elements underlying the world of phenomenal manifestations and entering into the manifestations as the immanent grounds of their uniformity and stable persistence.

In drawing this conclusion we are not presuming to determine what concept science shall reach, of the material elements she thus finds it necessary to postulate. We are only anxious here to show that the postulate is a necessity,

and that the grounds on which it rests are real rather than imaginary. The refinements of the scientific imagination may lead to modifications of the notion of matter without end. It may well be that the ideas of the present will not be adequate to the demands of science a decade or fifty years hence. But that physical science shall ever find itself in a position where it can dispense with some conception of matter is not to be expected. We have but to remember that matter is only a name for that system of stable and perdurable elements on which the whole rationality of science reposes, in order to be assured on this point. How, then, shall we state the principle that will express this fundamental fact, and thus formulate the notion of the highest rationality in the field of natural causation? Guided by mathematical analogies we might formulate it somewhat as follows. The root-notion of the sciences of natural causation is that of ground and phenomena. On this is based the principle, that the *rationale* of the changes of the phenomenal system is to be sought in an underlying system of permanent and stable elements which constitute their ground.

That we have reached something fundamental in the reduction of the two generic divisions of natural science to the terms stated above, there can be little question. That the idea of whole and parts does define the kind of a world the mathematician has in mind is indicated by the nature of his fundamental concept of number. For if we distinguish between the ordinal and cardinal properties of number we shall find that the former deals with things as a series of ordered parts, while the latter designates groups of parts as wholes or units. Ideally, then, the ordinal principle is that of the sum of all the parts of the world, while the cardinal principle is that of the unity of the world as a whole. As little question can there be as to whether the idea of ground and phenomena represents the kind of world with which the physical sciences have to deal. If we take the procedure of physics proper,

as stated here, it will be found that underlying all the investigations of the physicist rests the presumption that the terms with which he deals directly are not real substances, but only phenomena or manifestations of substances or forces which themselves are hidden from view and can be approached only through their phenomenal movements. The fundamental physical concept, then, which characterizes the world as the physicist conceives it, is that of an underlying system of substances or forces which do not appear to us in their own proper persons, but only vice-gerently in their manifestations. We may have occasion to modify this conception in order to make it metaphysically satisfactory, but it is clearly fundamental to the whole physical view of the world.

The metaphysical conception of the world differs from that of natural science, as we have seen, in the point of view, method and aim of its investigation. It takes its departure within consciousness itself, and identifies itself with the central effort of the emoto-volitional consciousness to realize the world by reducing its objects to terms of experience. The terms by which it defines the world arise naturally out of the heart of the conscious activity, and consciousness stands central, not only as knowing-subject, but also as supplying the necessary medium in and through which everything is realized. While it is true, then, that natural science approaches externally a world whose inner nature remains hidden behind a veil of phenomena, the most fundamental characteristic of metaphysics is the innerness of the standpoint of its investigation. Metaphysics approaches the world on the plane of its internal nature, and can, therefore, have nothing to do with the presumption of physics as a final concept. The notion of ground and phenomena will, of course, continue to possess value, and the metaphysician will not be able to dispense with it. But he will no longer regard the phenomena of the world as hiding from view its inner nature which remains a mystery. The presumption of metaphysics is

that this inner nature is not only open to investigation, but that, as a matter of fact, it is consciousness itself, and to consciousness it looks, therefore, for the norms of its world-interpretation.

It is admitted here that this presumption is often veiled from the eyes of the metaphysician himself so that he continues to coquette with the notion of non-conscious reality. But it is none the less fundamental. Let it be clearly apprehended, then, that the metaphysical interpretation of the world is one that professes to define it in terms of its inner nature rather than in terms of its outer movements. There is only one open door to the secrets of inner nature, and that is the door of consciousness. For consciousness, by virtue of its inveterate tendency to roll itself up into the form of selfhood, lets the investigator into the secret of a world that is self-centered, every part of which is consciously related to every other part and all the parts to the inner point of self-organization. There is, in truth, no middle ground between the physical conception of a nature hidden behind the veil of phenomena and the presumption that in consciousness itself the norm of inner nature in general stands revealed.

Assuming the truth of the result here reached; namely, that consciousness supplies us with the norm of inner nature, let us begin our search for the notion that will adequately define the kind of a world with which the metaphysician has to do. We saw in the preceding chapter that the central category of metaphysical explanation is that of purpose, and that purpose involves a guiding and informing idea. In short, it was found that only intelligent purpose, an intention which is not blind, could serve as a principle of metaphysical interpretation. But after all we have in purpose only the notion of a form of activity, and we have yet to determine the world-idea which rests at the basis of this as its presupposition. What kind of a world-system is that in which the notion of purpose takes its place as its central and characteristic form of activity?

We are here coming into close quarters with the notion for which we are searching. The physicist, employing the notion of natural causation as his norm, conceives the relation between the world-forces which lie hidden and the system of movements that lie in the field of observation, to be one of ground and phenomena, the ground being the substantial presupposition of the causal system. Whereas, the metaphysician, employing the notion of purpose as norm, is led to conceive the relation between the inner world (the physicist's world of substance) and that of its outer manifestation, as one of *inception* and *realization;* or, to state the notion more substantively, the relation is conceived to be one of *idea* and *reality*. Bearing in mind that what we are in quest of here is a conception which will define the world of the metaphysician in the same fundamental sense that the conceptions of whole and parts and ground and phenomena define the worlds of the mathematician and the physicist, the vital significance of the conclusion here reached will be recognized. The world of the metaphysician, like that of the mathematician and the physicist, is dual, but the terms of its duality are no longer opaque in their inner nature, but are terms which spring directly out of consciousness and conscious experience. If we take them in their verbal form as inception and realization, it will be seen clearly how purpose becomes the natural term of mediation leading from one to the other. Lotze, who was dissatisfied with all forms of traditional idealism and whose aim was to reach a more realistic conception, found himself always thwarted in his efforts to carry out this aim. Agreeing with the idealist that the ideal world must in some sense be the *prius* of the real world, his question was, What must be supplied to the idea in order that it may become real? He could not answer his own question, and was forced, in order to bridge the chasm, to fall back on the conception of a universal substance which stood related to the phenomenal world in a way almost identical with Spinoza's conception of the relation of

natura naturans to *natura naturata*. In other words, his search for a realizing term in his world led him virtually into pantheism. What Lotze failed to discover was the volitional nexus between inception and realization. Schopenhauer had come upon the opposite form of difficulty. Starting with the repudiation of idealism he sought to construct a realistic doctrine of the world on the notion of abstract will or volitional striving. This striving which is without insight stumbles accidentally, or, we might say, miraculously, on the idea in its wanderings, and thus creates for itself a phenomenal illusion, which, however, is hopelessly bad and gives rise to the need of disillusionment. Schopenhauer is never able to prevent his world, in its efforts toward realization, from running into inevitable illusion, and the only way he can see out of the muddle of existence is to turn upon the source of it all and strike a blow at the will to live.

Returning now to the point reached in the argument, we have seen that the two fundamentally characterizing terms of the metaphysical world are the concepts of *inception* and *realization*, which, translated into substantives, become *idea* and *reality*. For opposite reasons, as we have seen, Lotze and Schopenhauer failed to discover the connecting link between idea and reality. But why should any connecting link be necessary? Is not the search as futile as was the hunting of the Snark? Now the search itself will have to settle the question of futility. The other question, that of a need of mediation, cannot be lightly dismissed. What is there lacking of complete reality in the notion of inception or idea? From the standpoint of finite processes, the distinction between the idea and the real is well marked and fundamental. The thought of a thing precedes the thing itself, and some energy of causation or production is involved in its realization. But it is open to question whether this distinction be absolute, and whether an infinite faculty of inception or idea would sustain a similar relation to the real. Let

us suppose that this distinction vanishes in the sphere of the infinite, what results would logically follow? One result would be the identity of *thought* and *reality,* and, therefore, the realization of everything that should by any possibility be conceived. Now, inasmuch as it is open to a finite intelligence to conceive many hypothetical opposites of the ideas which it goes on to realize, and, outside of this, to inhibit the process of realization in the case of any given thought or idea, can we deny this same free range of ideas to the infinite without thereby imposing on it a very decided limitation? That thought should have free range to think that which *is not* to be, as well as that which *is* to be, seems to be involved in its very nature as thought. Again, the presumption of the identity of thinking and realizing, in carrying with it the equal realization of everything conceivable, seems to take away that prerogative of choice among ideas which gives a being real power over its world. Besides, there is no analogy in experience for the identification of mere thought with reality. Even in the case of fictitious personages and creatures of imagination, the mental creature does not become real until it has been assigned a place in some system which has been made objective by some dictum or convention of will. Without pursuing the discussion further, we may conclude that whether the process be regarded as finite or infinite, the distinction between inception or idea, and realization must be recognized as vital and thought must not be robbed of free agency with respect to the realization of its ideas.

The question is open, then, as to the mode in which that which is conceived in idea may be either inhibited on the one hand, or else realized. If it be inhibited, what is it that inhibits; and if realized, what is the *modus* of the realization? The answer to these questions will lead to the discovery of the nature of the oversights of Lotze and Schopenhauer. Lotze overlooked the volitional term, or at least failed to see its necessity in order to make his world-scheme adequate. If we ask what more than thought is

needed to make a world real, we are led up to the reply that *intention* is necessary; intention which takes on the form of purpose. For it is only when thought shapes itself into purpose that it liberates the volitional energy which leads to its realization. Now, will itself, when it takes the form of intention in purpose, has an emotional presupposition which we call interest, and interest is part of the content of the idea itself—that which gives it attractiveness to the will—while the purpose or intention is the dynamic outgo of the idea toward the realization of the attractive content. But this content has been conceived as content of idea before it has become realized content. Interest attaches to the conceived content, and this leads to its translation into willed or intended content, and this intention or purpose is the spring of realization. Schopenhauer overlooked, or rather denied, the *ideal* term of this relation. His world does not originate in ideal or conceived content, which, through interest, becomes an object of will. The first term is that of will itself, and it takes the form, or rather lack of form, of blind and subjective striving which leads to no rational outcome. For, though will meets the idea somewhere, the transaction takes place too far down the stream and is of no avail.

The mediator which is needed to connect the inceptive and ideal processes with reality is the notion of purpose. What is to be real must not only be conceived but also intended. The content of the idea may fail of realization, since it may be inhibited by hostile interest and by the intention not to realize. There is doubtless in the world a large sphere of bare possibilities which are never realized, and among these may be found not only suggestions of evil which are positively inhibited by a hostile will, but also, mayhap, creatures of the divine imagination which fail of entrance into the world of reality. The open door to reality is from *idea to purpose*, reality being the result of the purposive activity. How, then, shall we formulate the principle of rationality in the metaphysical sphere?

We have seen that the fundamental notion of the metaphysical world is that of idea and reality. The mediating term which embodies the form of motion in this field and also makes the transition from content of idea to content of reality is purposive, and purpose is action in the form of finality, just as natural causation is action in the form of mechanical determination. The principle of metaphysical reason may then be stated as follows. *The doctrine of the world that is to be regarded as metaphysically satisfactory is one which proceeds on the dual conception of an ideal and a real world, and which connects the two through the mediation of purpose in such a way that the real world is to be regarded as the realization of the ideal world in which it arises as merely conceived content.* The content of reality is thus identical with ideal content, but it is not that ideal content unmodified, nor is it open to metaphysics to say that there may not be indefinite spheres of content which remain ideal and have no place in the world of reality.

Making our way step by step through the processes by which natural science and metaphysics achieve their constructions of the world of existence, we found that the concept of the world under which these constructions are effected has passed through several stages of transformation. We found that mathematics, dealing with presentative phenomena in space and time, organizes the world of its investigation under the concept of whole and parts, and that its ideal is of an infinite whole within which the mathematical processes have the widest scope. Entering the field of the physical sciences where natural causation reigns supreme, the scene changes and the ideal world is conceived under the notion of ground and phenomena. The idea of a mathematical whole proves itself inadequate to the demands of physics, for what it requires is some guarantee of the uniformity and stability of its phenomena. This cannot be found in the phenomena themselves, and hence the need of substituting for the notion of a whole that is the ideal sum of parts,

that of ground-substances of which the parts of the world are to be regarded as manifestations. Also, the notion of terms qualitatively indifferent proves itself no longer adequate and must be translated into that of changes or modifications in the underlying and persisting substances which constitute the ground of the world. When, finally, we enter the metaphysical preserve and essay an interpretation of the world from the standpoint of its inner nature, the notion of ground and phenomena is proved to be no longer adequate. The inner nature finds its type and its analogies in consciousness, and especially in that fundamental form of consciousness which we call selfhood. Now, consciousness as selfhood relates itself to a world of realization through the mediation of its own purposive movements. For the inner world which underlies these purposive movements the notion of ground-substances will not be adequate. There is required the notion of something which relates itself to the purposive movements of the world as their true rational ground and *prius*, and this want can be satisfied, as we have seen, only in the reduction of the notion of a *ground* of the world to the *idea* of a world in which a ground is conceived. The notion also of *phenomena*, that is, of changes which are merely the indices of the thoughtless impacts of substances, can no longer maintain itself. For this we must substitute the notion of the *realization*, in the forms of existence, of what has already been conceived in idea. The mediator of this realization we have found to be *purpose*, a term which connects idea with interest and will, and through these with realizing efficacy.

Now, the three fundamental conceptions which consciousness achieves in its successive efforts to construe the world in terms of knowledge may be taken to represent three successive rational categories of its essential nature. In view of this, as a final consideration, we wish to ask whether any permanent incongruities or unresolvable antinomies arise in connection with these categories. There

is one presumption which would lead inevitably to such results, and that is the claim which is liable to be put forth for the finality and exclusive validity of some one of these points of view. The mathematician may claim for his point of view exclusive validity as against that of natural science which conceives a world of substances and causal activities. Under the concept of whole and parts he may seek either to prove the notions of substance and cause to be illusions, or he may attempt to reduce them to the strict terms of the mathematical process. Now, in treating of method in the following chapter we shall attempt to show how mathematics has a sphere of application to physical processes. Here, however, the question is a deeper one, whether the basal notions of physics have validity of their own apart from mathematics. The answer to this question will be in two parts. In the first place, we find that any effort to reason away these underlying physical concepts will prove itself to be futile. It is by no accident that physical investigation comes upon them, but rather, by way of a demand that its own procedure shall be rationalized and the terms with which it deals grounded in a stable medium. These notions are, therefore, as inevitable as the movement of science itself. But, secondly, conceding their right to exist, why should not the concepts of physics be in the last analysis reducible to those of mathematics? This might be possible if the difference between them were one of degree only. But we have seen that the notion of causal activity involves the presence of qualitative changes in the substances which constitute the stable world. If these changes are not to be regarded as illusions but as significant facts, it follows that their significance can be secured only by connecting them as qualitative modifications with the underlying substances of the physical world. The notions of cause, ground and phenomenon are qualitatively different, therefore, from the concepts of mathematics,—equivalence, whole and parts.

Turning now to the relation between the concepts of

physics and those of metaphysics, we enter here a battle arena where many a bitter conflict has been waged. That there should be anything but antagonism between two such concepts as those of natural causation and purpose seems preposterous. Natural causation distinctively excludes the notion of intention or idea from its mode of producing effects or changes, whereas this is the distinctive presumption of purposive activity. What is purposively achieved is something that passes from idea to reality through the medium of purpose. What is achieved by natural causation is something that presupposes only an impact of one intentionless substance upon another. What physics distinctively shuts out is intention and prevision. These constitute the differentiæ of purposive activity. It is clear enough, then, that there can be no question of the reduction of the concepts of physics to terms of metaphysics, or of the terms of metaphysics to those of physics. There is a difference of kind which precludes such an adjustment. Nothing can be clearer than the fact that in the three rational conceptions on which mathematics, physics and metaphysics rest we have three notions which defy all our efforts to reduce them to terms of identity. The correlation of the three disciplines must be effected, if it is to be achieved at all, in some other way than that of showing the ultimate identity of the conceptions on which they rest. It will be the business of another chapter to consider the problem of correlation in some detail. Here we shall content ourselves with a hint or two in closing an already wearisome discussion. While it is impossible to reduce the concepts of mathematics and physics to a basis of identity, this does not prevent the use of mathematics in physical investigation. The possibility of this arises from two facts, which are perhaps at bottom the same. In the first place, the substances of the physical world manifest themselves in the phenomenal forms of things and their movements in space and time, and thus present an aspect of identity with the terms of the mathematical. Mathematics will be applica-

ble to physics just so far as its world of things and movements is reducible to a plurality of parts which are definite and quantitatively unchangeable. Or, to express the same thing in different phrase, mathematics will be applicable to physical phenomena just so far as these show themselves capable of reduction to terms of definite and stable equivalence. The other reason for the applicability of mathematics to physics is found in what may be called the mechanical form of physical change. All changes are, by hypothesis, originated through impact, a fact which opens the way for the entrance of exact treatment. For if we assume that the phenomenon has a quantitative aspect and that the exact force of the impact is calculable, it will be clearly possible to state a law of phenomena by virtue of which the changes of these will vary with the force of the impact. Correlation will thus be possible without sacrificing differences that are fundamental.

But surely a more formidable obstacle will be encountered in any attempt to correlate the concepts of physics and metaphysics. Let us not mistake here what the effort to correlate involves. We have already concluded that there can be no question of the reduction of one set of conceptions to terms of identity with another set. Natural causation and purpose can never be the same. Nor can idea and reality be the same as ground and phenomena. It is possible, however, that while this is true, a real correlation might be effected from some other point of view. If, for instance, we distinguish between the forms of manifestation and definition and the content which is successively manifested and defined in the various modes of world-interpretation, it will be possible to regard the notions of whole and parts, ground and phenomena, idea and reality, as successive modes of characterizing a common world of things. For if we observe the distinction between things and their behavior, with which we started out, mathematics and physics may be regarded as two different ways, having points in common, of conceiving

one world of things from the point of view not of their inner nature, but of their outer conduct. Mathematics and physics thus deal with the one world but under different concepts and presuppositions. Again, if we place natural science on one side and metaphysics on the other it will be found that natural science nowhere doubts the existence of an inner nature of things but only its knowability, and from the standpoint of natural science the validity of the doubt must be conceded. But if we admit the validity of the metaphysical point of view; namely, its departure from the inner nature itself and its presumption that in consciousness we have the type of inner nature in general, then the validity of the doubt of natural science ceases to exist for metaphysics whose specific problem is just the question of the inner meaning of the world. Let us admit this, and we then have natural science and metaphysics defining a common world of things under two sets of concepts and presuppositions. Natural science defines under concepts and presuppositions which admit the existence of an inner nature, but directly handles only the phenomenal aspects of things; while metaphysics, presupposing the construction of natural science which defines the world from the point of view of its manifestations, assumes as its special task the interpretation of the one world which gives itself the phenomenal utterance, in terms of its own inner nature. Metaphysics thus seeks a construction which will tell us not simply what things are in their manifestation, but the inner meaning or intention which expresses itself in this manifestation. From such a statement we begin to see how it may be possible for the one world to have in it room and function for two such different agencies as natural causation and purpose. If natural causation expresses the form which the *de facto* world takes on in these movements which, taken as a whole, constitute to observation its outer behavior, then purpose, as we have construed it, will express the form its activity will assume when conceived as the utterance of the inner nature of things.

CHAPTER III.

METHODS IN PHILOSOPHY.

THE term method suggests something dry and logical and will doubtless frighten away all but the elect who are foreordained to be saved. But there are two ways of looking at method, one technical and somewhat dry, the other more profound and less technical, but also dry to any one who does not find thinking interesting. In the technical sense, method is a name for an instrument of speculation or research, and our method in this sense will be simply our way of ordering and testing our processes in order to reach results which may be depended on. Deduction and induction are names of method in this sense and our deductive and inductive logics, aside from the psychological matter they contain, will be found to consist of elaborate directions for the systematic conduct of our thinking or observing, together with a conspectus of the false roads which lead the unwary investigator astray, and a table of tests by means of which the validity of results may be determined. It is not our purpose here to decry this technical conception of method, for every one who reasons or investigates must have to do with it. There is, however, a profounder sense of method to which the deeper interest of our inquiry attaches because it involves conceptions not only of the *modus* but also of the fundamental character of the procedure to which it applies. In this profounder sense our method is our way of looking at and interpreting

the world. In the preceding chapter we have distinguished between the two ways of looking at and interpreting things which are characteristic of natural science and metaphysics. This distinction will serve here as a point of departure in a study of the deeper sense of method. What are the characteristic features of the method of natural science in its construction of the world? We have already seen that natural science is external in its point of view, observational and descriptive in its procedure and phenomenal in its concept of the kind of a world it seeks to define. What, then, have we left to consider under the head of method except its technical details? We shall find that a very important consideration remains. We saw in a preceding chapter that the external standpoint of natural science with relation to the object of investigation, involves indifference of nature between the investigating consciousness and the things which fall under observation. This means a strict inhibition of the investigating consciousness from the reading of its own nature into the things it is studying, or from the use of any analogy of its own inner activity as a principle of definition in the sphere of the object. The result of this inhibition is the virtual translation of the things of the phenomenal world into things in themselves, to whose inner nature the observer has no clues and which he must approach, therefore, in a completely external manner through the study of such portions of their conduct as may come within the range of his powers. The objective world will, therefore, constitute for him an order of phenomena which must be given to him in presentation and toward which he must take the attitude of one who is studying a system of things wholly outside and alien to himself. Of course, he may find in the course of his study that things reveal aspects which make them seem in a sense kindred to himself. But so long as he remains true to the natural science point of view he will not let these aspects alter his impartial attitude toward the world. That world will present itself to him in an objective order

to which he will find it necessary to accommodate himself in order to discover its laws. The question as to which shall lay down the law to the other will not arise, since it will be obvious that the objective order holds the right of way and that the observer must play the part of a waiting spectator, it being no part of his business to determine what shall turn up, but only to await and describe. We meet the issue here involved in the general question as to the priority of mind or matter in the physical world. It is not a question of the relation of the two orders, whether they represent a parallelism or an interaction. The truth is, natural science has no dealings with the two orders of phenomena except as an incident in its procedure and then it remorselessly subordinates the mental to the physical. The question here is simply one of attitude, and it has been made clear that in the physical world the physical and not the mental, the non-conscious and not the conscious, claims the priority. The method of natural science is one, then, in which the world of things stands out as an objective order which the investigating consciousness must approach externally and observationally.

Method in metaphysics in the deeper sense of the term, involves a complete revolution of the method of natural science corresponding to the change in points of view. Metaphysics, occupying as it does the inner rather than the outer standpoint and approaching the nature of things by means of the analogies of consciousness which it takes to be the type of inner nature in general, is thereby led to recall the natural science presumption of *indifference* of nature between the investigating consciousness and the things investigated, and to substitute for it the presumption of *kinship* or *community* of nature.

This involves that change of attitude toward things to which Kant has applied the famous phrase *Copernican revolution*. Historically, we have in Kant's experience an interesting and deeply significant incident. A study of the writings of the pre-critical period, together with the aids de-

rivable from Kant's letters and from other sources, brings to light the fact that in the early stages of this period Kant's own point of view was determined largely by the natural science of his time, particularly by mathematics and the Newtonian physics of which he was an enthusiastic partisan. The study of physics bringing the mind of Kant into the attitude of a spectator of an objective order of nature which must be approached through the senses, gradually undermined the principle of dogmatic rationalism in which he had been indoctrinated and which taught him to seek the source of the world-order in a certain order of rational conceptions from which the course of the world is to be deduced. Kant was forced to choose between the two alternatives of thinking out the world-order in the light of certain *a priori* conceptions, or, of approaching that order objectively and determining its contents by observational methods. The result was that his faith in dogmatic rationalism was shaken, but as yet not wholly destroyed. The work of destruction was completed by the empiricism of Locke and Hume. The study of Locke, and particularly of Hume, brought Kant face to face with a system which called in question all his dogmatic presuppositions and corroborated the testimony of natural science by claiming that all our ideas must seek their originals in the senses which in turn obtain their materials from without. In short, the lesson which Kant learned from Locke and Hume was a further confirmation of the validity of the standpoint of natural science. In the order of sensations as well as in the objective order of phenomena, the world of things held the primacy, and consciousness must adapt itself to these objective orders in order to know them. Now, all this seems obviously true from the standpoint of common sense, and the plain man might well ask, "Why answerest thou further?" But we have still something to learn from Kant. The effect of Locke and Hume on Kant's mind was a total and final breach with dogmatic rationalism. Kant first became an empiricist and finally, under the influence

of Hume, temporarily at least, a sceptic, his scepticism arising from the fact revealed by Hume's analysis, that empiricism having committed itself to an objective foundation is brought to the discovery that the order of sense presents only an illusion of objectivity while in fact it is purely subjective. This discovery did not represent a finality, however, with Kant as it did with Hume, but rather induced the great crisis of his intellectual development. Kant could not rest in scepticism, but what was to be done? What occurred to Kant was a transformation which led him to the standpoint of critical rationalism. This transformation he called a Copernican revolution, and the question here is, What was the significance of this revolution, for Kant's mental history as well as for philosophy itself? Every student of history knows that Copernicus revolutionized astronomy by bringing about a change from a geo-centric to a helio-centric conception of the planetary system. To Copernicus we moderns owe the undisputed primacy which we ascribe to the sun in our planetary system. Now Kant, following the analogy of Copernicus, conceives a similar revolution in the sphere of mind. To understand the revolution correctly, however, some knowledge of Kant's mental situation before it took place is necessary. It is to be borne in mind that to Kant the position of dogmatic rationalism was no longer tenable. He had frankly accepted the point of view of natural science and he was an empiricist in philosophy. Natural science and empiricism had in common their occupation of an objective point of view,—their insistance on an objective order to which the thoughts of men must adapt themselves. And the discovery that the objective order of empiricism was illusive, while it drove him for the time into philosophical scepticism, did not cause him to doubt the reality of the objective order *per se*. It was there embodied in the *Anschauung* of natural science, and Kant was a loyal partisan of natural science from the beginning to the end of his career. But he was a borne metaphysician also, and

natural science did not supply him with a complete doctrine of the world. A more ultimate interpretation was needed. And yet the effort to develop this interpretation on the basis of an objective order of sensations, and by means of the ordinary instruments of science, had proved a failure and had given birth only to the illusion of objectivity while in truth it was a purely subjective affair of man's own imagining. The result was a complete dualism between the order of natural science and that of metaphysics with no mediator anywhere in sight.

Two alternatives are open to a thinker in Kant's position. He may become a philosophical sceptic and hold the objective order of natural science to be final; or, he may look for a deeper insight which will enable him to remain loyal to the objective order of science without sacrificing his metaphysical faith. This latter was the course followed by Kant. His search led him to the position of his later philosophy and the insight which came to him was in substance as follows. He saw that the security of natural science in its objective order arises from its acceptance of that order without question as to whether it can be taken as final or not. Kant's reflection on things led him to a distinction which may have been suggested by that of Locke between the primary and secondary qualities of matter. I refer to his distinction between the form and matter of things. Only in the matter could Kant find a direct reference to anything extra-mental, and this reference led him to assert a system of things-in-themselves lying outside of the limits of experience. The forms of things are those aspects of them which are essential to their existence as things; and with reference to the world of things, those aspects which characterize it as a whole and on the basis of which it can be reduced to the terms of rational knowledge. Avoiding details, it may be said that Kant's analysis led him to select out as constituting the forms of the world of presentation, space, time, and, as derived from them, quantity. While in the sphere of *understanding*

where the world of presentation becomes further reflected, a group of forms emerge, central and typical among which stands that of natural causation. But space, time, quantity and causation are just those aspects which are most fundamental to the objective order of natural science. We have seen that its whole procedure rests on these, and that without them it is not possible to conceive the existence of any order of things or events. They are, then, the fundamentals of the very world with which science so confidently deals. What, then, is Kant's conclusion about these world-forms? Simply this, that when we carry our analysis deep enough we find that *those very forms which supply true objectivity to the world of natural science are functions of a primal activity of mind in its first relation to things*. There is a primal mental activity that generates those form-giving and organizing concepts which render the appearance of any orderly and coherent world in the field of experience possible.

It was in this discovery that Kant achieved his Copernican revolution. Just as the senses in astronomy produce the illusion of sun and planets revolving around a stationary earth, so in metaphysics the senses give rise to a similar illusion of a purely extra-mental order of things to which, as stationary, our thoughts must completely adapt themselves. The illusion in astronomy was cured by an appeal to the less obvious but more certain. And Kant seeks to cure the metaphysical illusion by a corresponding appeal from the obvious to the rationally necessary. Though it seems obvious that the real order of the world is extra-mental, and the plain man would be scandalized by the denial of the obvious, yet analysis makes this denial necessary. The real order of the world, while truly objective, is not wholly extra-mental, but mind has supplied to it the essential features of its objectivity. The result of the discovery for Kant was a change from what we may call a hylo-centric to a psycho-centric conception of the world of reality. The mind is no longer the mere spec-

tator of a system that is *ultra* and alien to it, but it finds the constitution of the system to be akin to itself: to be, in fact, the creature of primal mental activity. And it is on this fact that the faith of science in its world, is found, in the last analysis, to rest.

Now we are not holding a brief for Kant and the sole motive of this elaborate study of the Kantian revolution is its vast significance for philosophy. Kant did not carry his revolution far enough to reach absolutely satisfactory results. The real significance of the revolution lies in its demonstration of the fact that the only tenable standpoint for metaphysics is that of consciousness itself in its effort to realize the world. In this effort consciousness or mind holds the primacy and supplies the basal conceptions under which the real is to be organized and defined. Kant's insight had exhausted itself before it reached a point of final analysis where all this would have become clear. Let us suppose, then, that the Kantian vision had been large enough for the whole demand,—To what conclusion would it have led? In order to answer this question it will be necessary to refer again to the history of Kant's pre-critical period. The evolution of the critical point of view covers two periods in Kant's history. The first lying between 1766 and 1771, the latter being the date of his inaugural on the *Principles of the Sensible and Intelligible Worlds.* In this address Kant shows that his critical doctrine has been practically completed in its application to the sensible world in space and time, but that the idea of the categories has not as yet been discovered. The discovery and development of the doctrine of the categories occupies Kant from 1772 to 1781, the date of the appearance of the *Critique of Pure Reason.* Now Kant characterizes the two parts of his theory embodied in the *Aesthetic* and *Analytic* of that work, as the doctrines of *perception* and *conception,* and he conceives the whole aim of his effort to be the working out of a true synthesis between perceptions and conceptions; or, to be more exact,

between the formal and empirical factors in the content of perceptions and conceptions. The student of Kant finds three parts in his Critique corresponding to the three functions *perception, conception,* and *idea,* the latter standing for the three ultimate conceptions involved in the interpretation of the world as a whole. And while it is found to be true that Kant obtained a fresh insight as a basis for his successive constructions in the fields of perception and conception, there is no record or other evidence of any fresh insight as the ground of his treatment of the three ideas of reason. It is here, then, I think, that we are to look for the fundamental weakness of Kantism, in its failure of insight in dealing with the three ultimate ideas of reason. Bearing in mind that what Kant sought in each field was the deduction and synthesis of formal and empirical elements, and that the formal elements, while real in synthesis with the empirical, are, apart from them, abstractions of thinking, let us suppose that Kant had entered the territory of these ideas pursuant of the aim which animated him in his other investigations. Assuming that his insight were commensurate with the problem, what would we expect him to find out about this territory? If we would answer this question intelligently we must first consider the nature of his finds in the other two fields. It is only in perception that form comes into *immediate* relation with sensation, as space and time. The doctrine is that space and time are real as forms of the sensible world; that their function in relation to this world is to supply organization and objectivity; that without them it would be without form and void. Passing into the field of conceptions we enter the world of the categories or the sphere in which the world is apprehended through certain fundamental concepts. Now, what will appear here to careful reflection is the fact that while the two factors of a concrete world are present here as they were in the field of perception, yet neither is identically the same. The forms in perception are what Kant calls pure

perceptions; that is, pure intuitions, while the empirical elements are unorganized sensations. Here, however, the forms are terms of thinking; pure conceptual intuitions, if you will, while the empirical elements are no longer unorganized sensations, but *the organized world of perception*. There is an advance in organization, and the empirical term in the synthesis is always simply the organized result of the preceding stage of activity. Had Kant kept this in mind when he came to deal with the ultimate terms of world-organization which he found in the three ideas of reason, there can be little doubt that he would have come into possession of an important insight. Kant's difficulty regarding those ideas was, as we know, the absence from the field of ideal activity of any empirical term for the constitution of a real synthesis. Let us ask, however, where Kant found the empirical term for his synthesis in the sphere of causation. Not in unorganized sensations, but in the organized world of space and time. Given this world of things and events in space and time, consciousness brings forth from its treasures the category of causality and requires that the world shall be further organized under the principle of the conditional dependence of its parts. And thus the world of natural science arises. Entering the field of the ideas of reason we are struck with their great similarity. They are substantially all principles of *unification* though applied to different phases of the real. Disregarding this for the moment, let us ask why it is that Kant is unable to discover any empirical content for these forms. It is because he is unable to apply them directly to the world of sense. The world of sense is finitely limited and its analogies restrict it to a certain type of object which alone it can regard as real. An object of sense is one that appears and takes its place as a phenomenon in space and time. But what about the causal world of natural science; can it appear as a phenomenon in space and time? It is true that the causal world has a connection with the world of space and

time and Kant has something to say on that topic. But in the causal world the presented term is always a *symbol* of some deeper relation or reality, and the world of cause in its first person does not show in the order of appearances. Nevertheless, the causal world is a real world which has its place in a system of experience. Now, it is this causal world, this system of dynamic relations symbolized but not presented in the world of space and time, that constitutes the empirical term in the higher field of the rational ideas. In view of this empirical world which is simply the world of natural science, the problem of reason is simple enough. If we follow Kant and recognize three ultimate ideas, there will emerge three distinctly metaphysical problems. Let us take for our point of departure the ground-concept of natural science,—that of the world as a system of grounds and phenomena,—the three ideas of the Kantian metaphysics would be related to it as follows. Viewing the world on its phenomenal side it presents itself in two systems of qualitatively different terms which we may name respectively nature and the world of consciousness. The metaphysical investigation of the world of consciousness Kant names rational psychology, while to the corresponding investigation of nature he applies the phrase rational cosmology. Again, viewing the world from the standpoint of its grounds, we arrive at the last problem of metaphysics, that of the ultimate nature of reality. Taking these three problems in order and bearing in mind that the ultimate aim of Kant's endeavor, from the point of view of method at least, is the completion of the Copernican revolution, what we are to seek here is a characteristic treatment of the rational idea of nature in connection with the world of natural science. The dominating category of natural science is that of natural causation, and the metaphysical question would, of course, be, whether this category can be regarded as final or whether we are to look for some more ultimate conception. The answer would seem to be that while natural causation adequately enough

expresses the fact of interdependence of parts in a world of phenomena, it does not supply any rational justification of that fact. To constitute a rational justification it would be necessary to bring to light some ground of prevision or intention in which it would appear that the interconnection of the parts of the world is not the result of mere accident or blind fate. The only way by which natural causation itself can be rationally justified is through connecting it with some ground or principle of prevision in relation to which it would stand as part of the real meaning of the world. The application of the cosmological idea to the sphere of natural science would, therefore, have the effect of translating it into a system whose phenomena are, in the last analysis, connected with previsional grounds. Only thus would it become a completely rational world.

Coming next to the world of consciousness we may ask what form the metaphysical problem would assume here. To answer, it would be necessary to ask a preliminary question: How does natural science view this same world? We must bear in mind that the notion of cause is fundamental to natural science; that this will be true whether it investigates consciousness directly, or indirectly on the basis of the psycho-physical parallelism. In the direct investigation its aim will be to discover the movements of consciousness in order to connect them with physical grounds and conditions in the light of which alone it will conceive them to be explained. The indirect investigation is, however, the ideal of natural science in this field. Its basis is an assumed parallelism between the mental and the physical in which the mental is conceived to be everywhere definable in terms of its physical parallel or correspondent. The natural science of consciousness, therefore, proceeds on the presumption of the subordination of the mental to the physical. But from the standpoint of consciousness itself the physical is subordinate to the mental. It is only necessary for the Kantian here to assert the Copernican revolution, and that deeper point

of view which we call metaphysical will be achieved. Dealing with the same world of consciousness which natural science correlates with the physical world by means of its principle of natural causation, the metaphysician is able to find in consciousness itself a point of view from which the order of subordination is reversed. It is the nature of consciousness to assert its primacy in a world where everything must be known and realized either in or on its own terms.

Let us ask, then, how this change of standpoint transforms the world of consciousness and how it affects the question of its reality. In the first place, it is clear that a great transformation will have taken place. From the observational standpoint outside of consciousness the world of consciousness presents the ordinary appearance of a mass of phenomena to be studied and generalized. There is no part of consciousness which will have precedence over any other part, and all phenomena will be presumed to possess equal value for science. When we take the inner standpoint of consciousness itself between a knowing self and a world of objectivity which it seeks to know and realize, the self becomes the point of departure for knowing and realizing, and the question arises as to the reality of this self. What do we mean by reality? Anything that is essential to the existence of a system, the vanishment of which would carry with it the disappearance of the system, must be real so far as that system is concerned. Now, there is no question of the reality of the world of consciousness as a mass of conscious facts. The only question is one that concerns the reality of what we call self in this mass of consciousness. And it is not the fact of the self that is questioned, nor, when we come down to the bottom issue, does the doubt attach to the reality of *some* self. There are few, we presume, who would reject the notion of self as an illusion. Kant at least does not. His doubt attaches to the self of consciousness and in consciousness, which we know. This self is only a phenomenon and not

real. The real self is transcendent and different from the self in consciousness. Kant thinks that because the self in consciousness is resolvable into acts of self-consciousness it is not therefore the real self. But what does he expect? The resolvability of self into acts of self-consciousness only proves that the substance of self is conscious. What else should it be? If it be objected that the resolvability of self into acts of self-consciousness makes away with permanence, we may ask what is meant by permanence. If it means the ability of the *I* to carry itself through changes in consciousness so that in the series *a*, *b*....*n*, the *I* of *n* will be able, through memory and association, to reinstate itself as the *I* of the group *a*, *b*....*n*; then we have the whole transaction which we name permanence taking place in consciousness. If permanence in the conscious world does not mean this, can any one tell what it does mean? The difficulty arises in the assumption that discreteness and permanence are inconsistent, whereas the ordinal and cardinal processes of number supply an example to the contrary. Taking the ordinal process by itself and applying it to things, the world seems to resolve itself into a multitude of discrete parts. There is a solution of continuity just as when the self is found to be resolvable into acts of self-consciousness. But the cardinal process restores the continuity in its successive acts of grouping, each of which represents not simply a moment in the series, but also a summation of all that has gone before. The cardinal process thus accomplishes what is done by memory and association for the self. There is no reason why that which is discrete in its moments should not be permanent, and if this be admitted there is no reason for denying the reality of the self in consciousness.

It was open to Kant, then, to accept the self in consciousness as the real self. Had he done so the way would have been open for a complete realization of the Copernican revolution. For the reality of self in consciousness stands as a guarantee of the reality of the world of which

self is the center, and just as in cosmology the revolution enabled us to ground natural causation in an underlying intention which gives it meaning, so here in psychology the revolution makes it possible to still further rationalize the foundations of the world. If the self be the real center of the conscious world and consciousness claims primacy in its relation to the material and physical, then we have our world ultimately centered in selfhood. And it would follow from this that the activity of the world will, in the last analysis, take on the form of the activity of a self. Now, the activity of self is one of realization, and realization as we have seen is related to its idea through the volitional category of purpose. The psychological world will thus be conceived as a self-centered sphere which resolves itself into a succession of acts of self-consciousness having the realization of some idea-purpose or purposes as their aim. The whole activity of the world resolves itself into this form. The question remains, then, as to the terms of the synthesis. We have seen how Kant finds the empirical factor transformed in his successive synthesis. On the supposition that the rational term of the synthesis has been achieved in the notion of idea-purposes working out in forms of realization, where shall we look for its nexus with the empirical world? The answer is not far to seek. The result of the cosmological synthesis was the grounding of the sphere of natural causation in some kind of prevision in view of which it becomes part of the meaning of the world. The empirical term here will be this world of natural causation thus partially grounded, while the rational conception will enable us to complete the grounding by substituting for the notion of prevision, that of idea-purpose going out into forms of realization and fulfillment. If Kant could have seen his way clear to the assertion of the self of experience as the *real* self, he would have had grounds for asserting the reality of the categories of idea-purpose and fulfillment. And could he have realized clearly that the empirical term in all the succeed-

ing acts of his synthesis is just the concrete result of the preceding synthesis, he would have been in a position to see also that in translating the world of natural causation into a world whose final meanings are to be expressed in terms of idea-purpose and realization, he was not departing from reality but giving it a more adequate expression.

The final problem which Kant considered in the section on rational theology is simply that of the ultimate nature of reality. His reasoning is that our reflection leads us by a process of necessary thinking to the thought or idea of God as the necessary complement of all existence and, therefore, as absolute being. We are not concerned here, however, with the way Kant reaches the idea of God, but rather with the fact that he does reach it and that he considers it essential to the highest rational interpretation of the world. To Kant the principle of supreme rationality requires that the world, and in fact the sum of all existence, shall be grounded and completed in an absolute being whom we call God. Now in reaching this conclusion Kant was but obeying the demand that the world be reducible to some ultimate form of being. This demand will be met differently by thinkers who hold different views as to whether matter or mind are to have the right of way in the universe. If matter be given the primacy, some form of materialism will be the result. If the primacy be given to mind, then some form of mentalism will emerge. Kantism is anti-materialistic since its Copernican revolution has secured the world-primacy for mind. If mind be primate in the world then the ultimate being of the world will be a mental rather than a material constitution. Kant is carrying out the terms of the revolution when he makes God the fundamental being of the world. Why, then, does he fail to assert the reality of this God-determined world? The answer will involve two leading considerations. In the first place, Kant conceives God's relation to the world to be analogous to that of the soul's relation to consciousness. The real self he regarded as transcendent in the

sense of standing aloof from consciousness and being different in its nature from the self in consciousness. The self in consciousness is a kind of vice-gerent idea clothed with authority but having no reality. In like manner the real God, if he exists, stands aloof from the world-sphere and has a nature different from that of any being which we may form in our conceptions. The idea of God is a vice-gerent term in experience, to which authority is delegated but which possesses no reality. We have then a hypothetically real but completely transcendent deity related to a real idea of God in experience. That is the internal, immanent term of Kant's theism. Kant was logically justifiable in view of these conceptions, in asserting that while it is necessary to ground the world in the idea of God in order that it may be completely rational, yet we are cut off from concluding from it that God is a real being. The real being is hypothetical and completely transcendent, and cannot be brought into intelligible relations with the world of experience.

Let us apply here the kind of criticism we had recourse to in dealing with the problem of rational psychology. We do not know God directly, but inferentially if at all. This will be a point of difference between the knowledge of self and the knowledge of God. The self of experience, if we distinguish it from a hypothetical self beyond experience, is known directly. If, now, we dissociate the idea of God from that of some hypothetical being outside of the world of experience and alien to it in its nature, and associate it with a being inside of experience and, therefore, presumably not alien to its analogies, a situation will be created which will doubtless lead to results different from those that Kant actually reached. The question may well be put, why the idea of God which necessarily develops in experience should be denied all reference to reality, whereas the demands of reality are left to be satisfied by a hypothetical being that differs in an unknowable way from the being of our idea. In the first place, what is the motive

for denying reality to the being conceived in the idea? No doubt it is feared that a God within experience, and by that I mean within a possible experience, would be merged in the experience-processes themselves and would have no distinct existence. That would be naturalism in the field of experience. And this fear of naturalism leads to the hypothesis of a purely transcendent being. But why should a purely transcendent being be regarded as real at all? No intelligible reason can be given. For aught we can know to the contrary a purely transcendent deity is simply the unreal object of an abstraction. The idea of God which Kant finds necessary to his world is the idea of God in experience. Why, then, should not the real being of God be ascribed to the being conceived in this idea? We do not know such a being directly as we know self. But why should we stand aloof from inferential knowledge? What is it to know inferentially? We know the north pole only inferentially: that is, we know it to be necessarily in the region to which it is assigned, although no one has ever been there to see it, simply because it is necessary to complete the system of our planet and to explain the existence of phenomena which we know to exist, but which require the existence of a north pole for their justification. In like manner we would know God inferentially if the conception of him were found necessary to the rational completion of the world and for the justification of features of existence which would be otherwise inexplicable. In short, the necessity which Kant ascribes to the idea of God is of the species of inferential knowledge.

The aim here is not to argue the general question whether an inferential knowledge of God be possible, but rather whether Kant's claims for the idea of God do not amount to inferential knowledge of his being. It is here contended that they do, and that it is legitimate in view of that fact to connect that inferential knowledge, not with a hypothetical transcendent being about which we can form no intelligible conceptions, but rather with a being

within the scope of experimental analogies, to whom our idea, developed in the processes of our experience, has an intelligible application. Should any one who follows us up to this point be troubled still lest God be lost or identified with the world of experience, we have only to ask in reply how could he be so lost or identified? The idea of God which we form is not the idea of anything else, and hence our knowledge of God is not knowledge of anything else. We do not fear the merging of the north pole with anything else in our world of experience. It is clear that so far as the question of knowledge is concerned no difficulty can arise. But still, as a question of being, there may be some difficulty. If we say that the God of experience is real, do we not identify the substance of the divine nature with the substance of experience? What, then, is the substance of experience? We answer, consciousness, and we have seen that the essential form of reality in consciousness is that of selfhood. To identify the divine substance with the substance of experience, means only the conclusion that God is a conscious being and that the basal category of his nature is selfhood. In short, the assertion of a real divine being in the world of experience is just the assertion of a divine self in that world. This would be the conclusion of Kantism were its faith to be transferred from a doctrine of ultra-experiential reality to one that is intra-experiential and that conceives the content of experience, actual or possible, as being the content of the real.

Had Kant reached this result he would have been in a position to make his Copernican revolution complete; for, being no longer hampered with an ideal world that would not fit into the system of reality, thus forcing dualism between the ideal and the real, he could have closed the chasm and reached the conception of one sphere of reality. In this last step of his synthetic effort the divine idea embodying our knowledge of the divine being of the world of experience would have possessed more than regulative value in

determining our thoughts about the world: it would have possessed constitutive value, to use terms of Kant's, and would have defined for him the character of a real world. And in the notion of a world in which the supreme reality is a divine self, the primacy of mind over matter would be secured and the Copernican revolution, which metaphysics effects in the intellectual world, would be complete.

In a chapter devoted to method it might seem that a protracted criticism of Kantism like the one just concluded were altogether out of place. The only justification of the procedure I can think of is the fact that we have been studying the classical passage of modern philosophy in which is given the record of a master mind struggling on step by step toward a conception of the world that will make a rational interpretation of it possible. The Kantian instance reveals the fact that natural science and metaphysics can only come into intelligible relations with one another when the real difference of their standpoints and methods has been recognized, and that a complete rational theory of the world becomes possible only when we recognize the primacy of mind in the world. The outcome for the doctrine of method may be summed up in a few words. We have seen that in the field of natural science, where the mental is held subordinate to the physical and matter holds the primacy over mind, the whole technique of method, including its point of view, its principles of definition and explanation and the ultimate terms in which it conceives the world, are all determined by physical requirements rather than by requirements of mind; whereas, in metaphysics mind asserts its primacy over matter, and this primacy carries with it the terms of a final construction of the world of reality under the categories and analogies of consciousness, these arising in connection with that general activity of consciousness which we call experience.

Let us now, in the light of what has preceded, endeavor to sketch the outlines of a complete method of knowledge. Following the lines already laid down, the whole investi-

gation of reality may be divided into three stages, the mathematical, the physical and the metaphysical. We have found that the ground-concept of things on which mathematics proceeds is that of whole and parts. Everywhere its world resolves itself into wholes comprised of a sum of parts. This appears most clearly and most fundamentally also in the notion of number which, in its two-sided significance as cardinal and ordinal, everywhere deals with things as groups representing wholes composed of sums of parts reached ordinally and designated by the unit in the natural scale which at the same time represents the number of its parts. This unit is called its cardinal number. The cardinal number of any group is the unit, therefore, that will describe it in terms of whole and parts. That is what we mean when we say that the fundamental notion of mathematics is that of whole and parts. Now, it has been shown already how this conception of things is purely quantitative; how it answers simply and solely the questions, how much, and how many, but never any question that involves the quality of its terms. And it has also appeared that the whole value of the mathematical procedure depends on the fixity and unalterableness of its terms; one shall always mean one, and two, two, in exactly the same sense. The possibility of qualitative change or modification in the character of its terms would completely ruin its validity. The aim of the mathematical method is to reduce the contents of the world to terms of exact quantitative equivalence. Falling short of this, its results are worthless. Moreover, in the operation of the mathematical method it has been found that in addition to what is called pure mathematics, the application of its method to the investigation of things conceived under the notion of pure quantity,—that is, as a system of wholes which are the equivalents of the sum of their parts,—there is also a sphere of mixed or applied mathematics in which the method is employed in the operations of the physical sciences. One might well ask how this can be in

view of the fact that the concepts of physics are different from those of mathematics and deal with a world of qualitative changes. The possibility of the application arises out of that deeper insight of physics which leads it to ground its phenomenal system in a plurality of underlying substances out of the causal interactions of which the phenomenal changes arise. It is found that these substances have a quantitative aspect which arises out of their assumed persistence and stable uniformity. It is clear that persistence and stable uniformity involve quantitative fixedness, so that neither increase nor diminution can be allowed to enter. This being the case, the stable substances or forces may be assumed to produce, in the field of phenomena, relations which will present quantitative aspects and be so far open to mathematical determination. In other words, forces that are measurable may be assumed to produce results that are measurable, and thus physical changes may be open to mathematical calculation. But this will be in spite of, and apart from, their character as qualitative changes. Mathematics has nothing to do with qualitative changes as such, and it has a place in physical method simply because physical phenomena present an aspect of quantity arising out of their relation to forces or substances assumed to possess quantitative fixedness of character.

In passing from a system whose parts are related by means of the principle of quantitative equivalence to one in which the principle of connection is natural causation, we enter the domain of physical science.[1] Now physics rests on a fundamental doctrine of the character of things. We have seen that mathematics has need of no doctrine of the character of things. It deals with their quantity, and

[1] We use the term physics and physical here in a broad sense as including physics proper and biology: that is, inorganic and organic up to the point where mind asserts its primacy. In the second part of this volume the organic will be distinguished and given separate treatment.

its simple terms are what Kant called pure forms, that is, forms of the sensible world which are immediately present to consciousness. Altogether apart from the truth or falsity of Kant's doctrine, however, the fact stands undisputed that mathematics is never anywhere directly concerned with the changes of things. But physics is concerned with just this. The world of physics may still present itself in groups which are numerable, but this is not that about the world in which physics is interested. What concerns physics is that the world presents *outerly* only groups of phenomena that are not self-explanatory. What good does it do to number them? The great questions are, How did they get there and what is their business? In short, the questions of physics are questions of causation, and a question of causation is fundamentally a question of agency involving initiative. The real question of physics is not one of phenomena at all. The phenomena are there and physics is curious about them, but its curiosity is easily satisfied by generalization. This is only preliminary to what physics really wants to know. What physics really cares to find out is always a matter of agency. What are the agents of these happenings which we call phenomena? Not only so, but what are the permanent and stable agents or substances of whose activity they are the symbols in the field of observation? What has been called "the bookkeeping of science" represents, therefore, a most vital interest.

Such being the real interest of physics, its question is always one of causation; not what this phenomenon is, though that is interesting too, but what is its explanation. Is it a phenomenon of heat, light, electricity or magnetism? and if so, what law of activity on the part of heat, light, electricity or magnetism, does it exemplify? Or, it may be a phenomenon for the chemist, some case of poisoning. Here the question is one of agency; what kind of substance was it that gave rise to the effect? The answer will be forthcoming when the permanent substance is discovered to which the poison-phenomenon is to be referred. This

substance itself may, of course, be a compound or a modification, but it will be capable of reduction back to simple elements, and these will stand as the permanent agents, the real abiding causes of the effects in the phenomenal world. The all-determining concept of physics is thus the notion of grounds and phenomena, a world of phenomena which stand as symbolizing effects of a real world of things or substances which underlie them and are the agents in their production. It is only when the phenomena of the physical world are thus related as effects to underlying permanent causes that the notion of natural causation can be realized at all. For let us take pure phenomenalism which mistakes the symbol for the reality and denies underlying substances; the only notion of cause accessible to it is one that denies agency and reduces the notion to one of pure time-sequence in which anything may be the cause of anything (so Hume says), since to be a cause is simply to have the luck to become an invariable antecedent. But on the plane of pure phenomenalism the invariability is an inexplicable fact. That *a* should invariably precede *b* is just *a*'s luck. What more can be said about it? Pure phenomenalism translates the notion of cause into that of time *plus* luck, the latter being its distinguishing feature. If we wish to avoid this we must return to real physical conceptions which are only consistent with the notion of agency, and we must conceive natural causation in terms of the agency of the world-substances or forces in the production of phenomenal changes which are their symbols.

Setting out, then, from this conception of natural causation, let us endeavor to determine the essential features of the method of physical science. It will, of course, begin with a careful analysis and generalization of its symbols, the presented phenomena, but the fundamental part of its method will be the determination of these phenomena through their causal connection with the system of underlying substances and forces. It will be as phenomena of oxygen, hydrogen, sulpher, heat, light, electricity or mag-

netism, that they will have significance and be open to causal determination. For one symbol cannot be the effect of another, though it can precede it invariably in an order of time. The reason for its position in the time-series, which will also be the cause of that phenomenon, will not be some other phenomenon, but some substance or composition of substances that underlies it. Or, if we do not like a mode of statement which seems to separate the cause from its effect, a change of phraseology will lead to the same result. Let us resolve what we call electricity into the acts which we call electrical phenomena; then it will be true that the antecedent act *a* will be the cause of the the consequent act *b*, but in this case it will no longer be true that anything can be the cause of anything, for *b* will have a determinate character which will not only limit it to an electrical antecedent but to one with the character of *a*. In short, we include in our causal relation the notion of agency; that is, of a definite quality in the antecedent giving rise to a definite quality of the same species in the consequent. And that definite quality will be the nature of the substance we call electricity. That this nature is not known to us makes no difference. We know that it is this nature that by maintaining itself as a permanent substance renders the transaction which we call natural causation possible.

We have seen that mathematics is indifferent to quality in this sense and, therefore, to agency. Physics deals with quality and, therefore, with agency, and our question in this paragraph concerns the kind of agency which characterizes the physical world. We must not forget that the physicist is committed to the observational standpoint, and that he must presume the indifference of the nature with which he deals, to consciousness. Just here a few words may be in order as to what exactly that indifference implies. It does not imply that there are absolutely no points of community, for the notion of agency itself supplies one great point of community. And as agency is central in

natural causation, it might seem that the position of indifference had not been well taken. But agency is central in natural causation because it is central in all causation. The postulate of indifference arises higher up where the question is as to the *kind* of agency or causation involved. There is a distinction that is fundamental between the forms of what we may call physical and mental causation. If we consider the mental type first we shall find that it takes a form determined by the nature of consciousness itself. Its stimulating term is an idea which places what we call the cause before the act as its end or inducement. It thus acts as a final or end-cause, and this determines the form of its agency which we may call teleological. If, however, we take the physical form of agency, we will find that no idea is involved, but that the physical cause is conceived to be simply a prior force or activity which, by a kind of *pro-pulse,* gives rise to the effect. To the form of such activity we may apply the term mechanical. The term indifference, then, when applied to the relation of physical activity to the nature of consciousness, simply means that physical agency is different from conscious agency, that it is mechanical rather than teleological. While, then, the method of mathematics, being indifferent to agency itself cannot be said to be either mechanical or teleological, that of physics, resting as it does on the principle of natural causation, but involving no idea or foresight, may be called mechanical, and this term will signalize its points of difference both from mathematics and from the method of metaphysics which we now proceed to characterize.

The method of metaphysics is that of consciousness, and we have seen that this is fundamentally a method of agency. This relates the procedure of metaphysics to that of the physical sciences, for while the principle of the former is not natural causation, it does not follow that it is not any kind of causation. If we identify causation in its essentials with agency, we will have a place as central

in metaphysics as in physics. But it will be a different species of causation. Let us endeavor, then, to define the method which is characteristic of metaphysics. We have seen that the characteristic notion of the world in metaphysics is not that of grounds and phenomena, but rather that of idea and reality. If the latter term stands for the world realized, then it will be the correspondent of the phenomenal term of physics, but it will be much more. Physics almost empties its phenomena of reality and reduces them to mere, though significant, symbols, whereas metaphysics finds in the realized world the very soul of reality itself. Its phenomenal term, if we may use the expression, is richer than the unphenomenal by just so much as the real world is richer than the world in idea. Proceeding under the notion of idea and reality and holding as fundamental the notion of agency in its teleological form, the method of metaphysics starts out with the doctrine that the world must be conceived in idea, as the condition of its becoming a realized fact. This doctrine relates the procedure of metaphysics to that of physics inasmuch as it leads to the overhauling of the notion of natural causation which embodies the form of mechanical agency. Metaphysics requires that for the mechanical way of producing effects the teleological way be substituted, and it makes this requirement on the ground that if we are seeking the ultimate reason of the world we do not find it in mechanism since mechanism gives us mere productivity without foresight. A final agent must act on grounds of prevision. If this be conceded, then the *prius* of the real world must be something in which it is embodied in prevision. The world must exist in idea before it can exist in reality. This, at least, must be its mode of producing results in the sphere of reality. How, then, will this conclusion determine the attitude of metaphysics to the physical world? In the following way: It will not relate metaphysics directly to the phenomenal aspect of the physical world, but rather to its non-phenomenal ground-

substances. And its first problems will arise in connection with these. We have the fine guidance of Lotze here, who, in much the same spirit as that of our own endeavor, having translated natural mechanical causation into terms of final teleological agency, went on to the profounder question as to how the ultimate substances of physics shall be dealt with in a metaphysical interpretation. The doctrine of Lotze is, that no final reason for the world can be found in the notion of a plurality of permanent substances or forces. And the difficulty is not diminished but only increased by the reply which is sometimes made, that these forces are not only permanent, but also act by nature in a determinate way. Lotze regards this *determinateness* as itself needing explanation; for why should a thoughtless force act in a determinate way, and why should a plurality of thoughtless forces bring about a determinate result? The foundations of the world can be rationalized, Lotze claims, only by grounding the world in some reason or idea, in which its activities will be conceived and prevised, because they are synthetically realized. And Lotze's mind is so impressed with the need of grounding the determinateness of things that he is led to postulate as rational world-idea a universal substance in which the plural forces of the world are included and rendered determinate.

One may accept Lotze's principle without going to the length of postulating a universal substance. The fundamental truth in Lotze's doctrine lies in his conviction that it is in its ground-terms that physical science needs further treatment by metaphysics. And this need arises in view of the mechanical conception of these ground-terms, which prevails in physics and which is, in fact, essential to the physical method. The root-problem which arises for metaphysics is one that has no existence for physical science, inasmuch as it is the question whether any physical explanation can be taken as a final account of the world. Physics is not concerned with finality, but solely with efficiency. Physics asks what force or forces must be pre-

supposed as the effective agents of this result or group of results, and it is satisfied when an adequate account is given in terms of natural causation. But metaphysics seeks an answer that will not simply satisfy the requirement of efficiency, but also, and especially, that of finality. Now the final cause of the world must be found in the ground of the world, and if the theory of grounds which is offered does not satisfy that demand it will be rejected as metaphysically inadequate. The method of metaphysics thus correlates with that of physics while it differs from it in a characteristic way. The world-idea of metaphysics *is* the world-grounds or forces of natural science translated into terms of prevision. Before the world can be realized it must be prevised in some idea.

We do not stop here to work out the conception we have reached, into its details. But presuming that this fundamental point has been determined, it will be clear that the next step will be that of the application of the principle of metaphysical causation to the determination of results. We mean by metaphysical causation, teleological or final causation, and we have already determined the form of this as purpose. What, then, is a purpose? Metaphysically, it is a process in which an effected (efficiently caused) result is brought about in the form of finality, that is, through the prior conception of it in idea, which conception arouses the forces of its realization. What we have described here is agency in the teleological form, in which the pulse of realization is volitional. If we include the volitional then, where in the process are we to look for it? Manifestly in the forces of realization. There are certain forces of realization in the world on which physics puts a mechanical construction, and this is adequate so long as the problem is simply that of a uniform and stable grounding of phenomena. When, however, the question is one of *the real nature of the world,* the mechanical conception of these agents will not be adequate. Metaphysically, we look to our data not only to establish but also to explain phe-

nomena, and we therefore ask our theory to satisfy the demand of finality as well as that of efficiency. And inasmuch as the differentia of metaphysics lies in its previsional character, the explanation which will be adequate will be the one that connects efficiency with the spring of prevision in which its end and aim are determined. The second great step in metaphysical method, then, is the *translation of the mechanical forces of physics into volitional agents* which work toward the realization of a previsional end. It is a false method that deems it necessary to cast the physical forces to the dogs in order to make room for metaphysical agencies.

That this is a vital point in metaphysical method will appear from the following considerations. If the worlds of natural science and metaphysics have not a common content on which they simply put constructions developed from different points of view, then there are practically two independent worlds, and any correlation that is possible between them will be a purely external and artificial affair. If, however, these two disciplines represent simply different constructions put on the same content, it follows that the essentials of the one method will find their equivalents in the terms of the other. Thus, for natural causation in physics we have final cause in metaphysics, and for mechanical activity in the production of effects we have volitional activity in the realization of ends; while for the effects themselves we have realized ends or purposes. If anything be lost sight of in the transition from one point of view to the other, a defective conception of method will be the result. Now, one of the essentials of the method of natural science is the presumption of productive efficiency or agency on the part of its ground-substances or forces. Without this its view of the world is emptied of reality. The equivalents of these in the method of metaphysics are the volitional forces which take on the teleological form. The question here, stated exactly, is whether we are to conceive the volitional forces as the equivalents of the

physical agencies in the mathematical sense, that is, numerically equivalent but different in substance; or in a sense the reverse of this, which would maintain numerical difference and at the same time identity of substance. The former alternative leads, as we have pointed out, to a complete dualism by opening a chasm over which there is no natural bridge. The latter is the one that is chosen here because it avoids this breach in the real and at the same time seems to be in itself a more adequate and rational conception of method.

Let us consider it briefly. To be numerically different is to be different in form but not necessarily in substance. Two rain-drops are numerically different, but they are the same in substance. A gallon of water and a block of ice are numerically different, but they are identical in substance. We have seen that physical and metaphysical agency are different in form. One is mechanical, the other teleological. This does not preclude any degree of identity of substance we may find reason for ascribing to them. We have seen that the physical agents are translated into metaphysical by adding something to them, and that something is prevision. Add prevision to a physical agent and you translate it into an ideal agent, that is, an agent whose activity is informed and guided by an idea. This change inevitably leads to others. The mechanical form of efficiency is changed to the teleological, but it is still an energy that does something and produces results. The effect is changed into the realized idea, but it is still a resultant of some kind of energizing. In the metaphysical scheme we employ the energizing of will as the equivalent in physics of the energizing of natural causality. What is changed is the form, from natural causation to will; what remains unchanged is the agency that is efficient in getting results: in one case, phenomenal effects; in the other, realized ends.

The third vital step in metaphysical method bears on the connection between the phenomenal world of physics

and the realized world of metaphysics. Are these one, or are they different? The answer here depends altogether on the conception we form of the phenomenal world. If we regard it as *purely* phenomenal, and this we saw is the customary view of physics, then the phenomenon becomes a mere symbol of deeper reality and is in itself little more than appearance. But we have seen that there is a deeper view open to the physicist himself. He can immanate his forces in his phenomena so that these become acts of dynamic agents. The phenomenon is not a mere symbol then, but has in it the hidden nature of which it is an outer expression. The phenomenal thus becomes the real in action, or rather, the real in motion, and in studying the motions of things the physicist is never away from the heart of the things themselves. It is with this deeper view that metaphysics naturally correlates. For its basal notion is that of idea and reality, and its conviction is that reality is richer than idea in the sense that it adds fulfillment to the idea. Just as the world of moving agents, that is, of causes realizing themselves in their effects, is richer than that of grounds merely, or causes conceived apart from their effects; so the reality of metaphysics, which is that of idea realized through purpose, is richer than the ideal world conceived apart from its realization. What we maintain here, then, is the substantial identity of the two spheres, the phenomenal world of physics, taken in the deeper sense indicated, and the reality of metaphysics. For while they are formally distinct, the one being a system of effects mechanically related to their causes, the other a system of realities in which the idea is teleologically related to its fulfillment, yet in substance they are the same world; only, what the physicist treats for good and sufficient reasons as a mechanical result, the metaphysician, for equally valid reasons, treats as a teleological and ideal result. If the physicist happens at the same time to be a metaphysician, or if the metaphysician happens to be a physicist, or is in intelligent sympathy with the physi-

cist's point of view, he will find this doctrine very easy, however difficult it may be in outward appearance.

The last topic we shall attempt to treat in this already protracted discussion is that of the method of dealing with the final theme of metaphysics, its doctrine of the ultimate nature of the real. The question here is that so subtly argued by Lotze, whether the individual substances of the world are adequate to its rational explanation, or whether we must, as Lotze does, postulate a universal substance as a unitary and determinate ground of the individual forces. Metaphysics generally recognizes the necessity of some absolute or unitary force or being. But we have here to face the question whether, instead, a plurality of individual forces, particularly when they are represented as informed with ideas, would not be sufficient. We have seen that a fundamental article of metaphysical faith is that the world must mean something, and this has led to its translation of the world-forces into idea-forces, through the agency of prevision. If, then, it be a fundamental demand that the world have meaning, it is a fair claim to make under this specification, that the world as a whole should have meaning. And since to have meaning is, in the sense of its use here, to have intention, that is, to be represented subjectively in idea and objectively in an end-scheme of realization, it follows that the world as a whole must stand related to intention and have its place in an ideal scheme of objective fulfillment. But in resolving the world into a system of idea-forces have we not broken with the hypothesis of a universal substance, and, if so, how do we propose to transcend pure individualism? This is a formidable question, but not, we think, unanswerable. The postulate of the universal substance is in a sense a survival that has persisted after the notion which called it forth has perished. That notion was the scholastic doctrine of a substratum, espoused by Locke and thus given a modern vogue. According to this doctrine all the qualities of things are

related to substances in which they inhere somewhat as pins inhere in a pincushion. This is a crude figure, of course, but it sufficiently well represents the substratum-theory of the connection between qualities and the things they qualify. If we regard the whole manifested world, including not only material phenomena, but also thoughts, feelings, and conscious acts generally, as related to some underlying ground conceived after the analogy of the substratum, we reach the notion of a universal substance. But the notion of a substratum having been exploded, that of a universal substance has become a mere survival without rational justification. Let it be dismissed, then, and let us ask what we have left to put in its place. We have seen that the legitimacy of the requirement that the world shall have meaning as a whole, must be admitted. How can the world have meaning as a whole if there be no universal substance? Metaphysics can answer only by falling back on its doctrine of selfhood. Only if the world-idea be translated into the notion of a world-self can the unitary requirement be fulfilled. But here we seem to meet the dilemma of individualism. You have translated your world into a plurality of idea-forces, how are you going to escape pluralism? Thus the objector may urge. Well, the same appearance of pluralism exists in consciousness where we find a plurality of self-conscious ideas, but only one unitary self maintaining itself in and through the plurality of idea-forces and securing the unity of its world. We marvel at the wonderful thing we call self: how it can thus be wholly present in a plurality of acts and yet unify this plurality under one point of view.

We have only to substitute this analogy for that of the pins in the pincushion in order to see how our question can be answered. The unitary being in our consciousness is not some hidden thing that must be grasped in a presupposition. It is the selfhood which we apprehended in consciousness, and this selfhood is the real center of the inner life. We do not need to look for some ultra-conscious prin-

ciple for the unification of our conscious world. If, then, we apply the analogy of selfhood to the macrocosm outside of us, we shall discover that the idea-forces outside are the natural bearers of the function of selfhood. The plurality of forces is no obstacle except in appearance, for we have learned in our own experience how selfhood can maintain itself in a plural world. This maintenance we know immediately. But the objective maintenance we know only by inference; we are not the idea-forces of the world. But we know by inference founded on immediate experience how the idea-forces in our consciousness become the bearers of the self and its unifying function. And inasmuch as metaphysics demands that the world should have meaning as a whole, the answer to this demand will be found in the doctrine of the absolute being, not conceived now as some all-devouring substance, but as a self which can ride on the backs of many world-steeds, holding the reins of all and directing all to one common goal.

CHAPTER IV.

THE WORLD OF EXISTENTS.

TAKING the world in the concrete, it resolves itself into two groups of existences; the one occupied by the conscious self, the other by the rest of the things which make up the world. Now we are about to ask here as our first question, not how we know self, but how we know the things in the larger group which belongs to the not-self. And we are not putting the psychological question about the way in which things come to be apprehended, but rather the more fundamental question as to the grounds on which we assert their real existence. By real existence I do not mean bare existence, which is a thing of presentation, but rather the kind of *status* a thing is supposed to have when it is able to persist even when we are not perceiving it or thinking about it. I come to my study in the morning and find my ink-bottle standing where I left it the evening before and I assume that it has existed during the interval of my absence. The ink-bottle is not, therefore, a mere modification of my consciousness; it really exists. Now such being the fact, there are two questions regarding this ink-bottle which I wish to have answered. In the first place, how do I know that it is an object and not merely my own subjective impression; and secondly, on what grounds do I say that it really exists? The first question is not psychological but epistemological, while the second is metaphysical. How do I know that the ink-bottle is an object and not a

mere subjective impression? I may be told that this is all it was at first and that its objectivity is the result of a social process. But this account does not satisfy me because I am convinced that even the social process cannot create something out of nothing; that it must have some objective data to work upon. There must be something for somebody to see before it can be seen by a group of observers. The position maintained here is that the object has its first rise in the initial acts of the objective consciousness. Otherwise it is located too far down the stream and never acquires full status. Let us suppose the ink-bottle to be brought within range of the optics of a child in the first stages of learning to see. The child will not perceive the ink-bottle as any defined object, but where an ink-bottle would appear to adult perception there will arise some point of disturbance in the child's world, and this will arouse what we call *attention*: that is, it will focus what cognitive elements there may be in the child's consciousness on the point of disturbance and the result will be the first step in the objective definition of its world. This will doubtless in this instance be some point or patch of raised color indefinitely located but defined, so far as it is defined at all, by its color-contrast and its spatiality. How, then, are we to interpret this first cognitive experiment of the infant consciousness? Has it just made a mere specification of itself, or has it also performed a transaction in the objective world? If we deny it to be the latter, where does the experience of the objective begin? If this first act is simply a self-modification, we should naturally expect that further experience would make this clear. But further experience only confirms the illusion of objectivity, if it be an illusion. Our experience must begin with first terms which are not further resolvable, and what we maintain here is that the perception of the objective is absolutely primary and underived. The infant's perception of the ink-bottle is a definition of objective matter, or it is nothing at all. Carrying out the doctrine here indicated,

we may say that objective existence is given in the forms in which things get themselves defined in presentation. We do not need to worry about objective existence; it is with us from the beginning.

The second question, that of *real* existence, is one that involves several profound considerations. In the first place, when we ascribe real existence to a thing, say to this ink-bottle, we do more than assume it to be an object, a not-self. We assume it to be a not-self which somehow has the power in itself of persisting or continuing to be itself when we are not perceiving or thinking about it. Mill would say that the ink-bottle includes, besides the perceptions, a permanent possibility of perceptions, and that this is what is meant by ascribing to it real existence. But if this possibility be not itself more perception, which it would be absurd to suppose, then it is something different from perception. We do not seek to determine what it is here, but what we call *real* existence is this power to persist in being, apart from our perceptions. What, then, is involved in the notion of real things not ourselves, and how are we led to ascribe the quality of real existence to them? Our world of things is made up of two classes of objects which we call physical and mental. These may be distinguished further into objects proper and what W. K. Clifford first named *ejects*. And both physical and mental objects involve the distinction between the object proper and the eject. This ink-bottle, for example, is object in so far as it manifests itself to my perceptions. As object, it is a manifested group of qualities. But the ink-bottle is also an eject. It has a persistent being which is not perception. This being is not apparent but hidden, and is not, therefore, immediately apprehended, but is grasped in an inference. The ink-bottle as a real existence includes in its being, or in that which makes it real, not simply a group of perceptions to which it gives rise in the consciousness of some observer, but also, and more fundamentally, a hidden something which enables the ink-bottle

to persist when not actually manifesting itself in perceptions and which is presumed, therefore, to be the ground or cause of the perceptions themselves. The ink-bottle in its hidden nature is what, following Clifford, we would call an eject of the physical type. By this I mean: (1) that it is an object and not myself; (2) that its inner ejective nature is to be taken as physical rather than mental. How do I know this latter fact? Not by any direct process whatever. In ascribing real existence to the ink-bottle I have assumed not merely its objectivity, which I know as a primary fact, but also its persistent being, which apparently I do not know at all. The Humian has an easy task refuting the realist at this point until he runs up against the absurdity of his own position that real existence is nothing but perception. At any rate we do seem to be very sure of something here about which we apparently know nothing. But is it so certain that we have no knowledge? Professor C. A. Strong[1] ascribes our assurance of ejective existence to an original race-instinct and apparently regards it as otherwise inexplicable. This is to make our faith in the real existence of other minds than our own irrational and I understand Professor Strong to admit that it does. Now, such a conclusion does not shock me, but I am not quite ready to admit it. We have seen that our knowledge of the object is of the most primary character. We cannot call it in question without denying the possibility of all knowledge. But our assertion of ejective reality is not, at least, a doctrine of immediate knowledge. If we know it at all it must be by inference, and if our knowledge be inferential, from what data is the inference drawn?

Let us carry our inquiry into another field. We have seen in a former chapter that natural science rests on a distinction between phenomena and their grounds, and that the phenomenon is connected with its ground by natural

[1] In *Why the Mind Has a Body.* The Macmillan Co., 1903.

causation. Translating the terms of natural science into terms of object and eject as above defined, it is evident that the object will be the phenomenon while the eject will be the ground-substance or force with which it is connected by natural causation. The world of objectivity will thus, when distinguished from its grounds, become a system of symbolical effects of the world of underlying substances and forces; that is, of the world of ejects. Why, then, does natural science assert the existence of this world of ejects? Not from any direct knowledge of their existence, but because, without presuming their existence, the phenomenal world itself would become wholly irrational and absurd. The phenomenal world is merely symbolic and does not have meaning in itself. Besides, as we have seen, in itself it is lacking in persistent uniformity and stability. The main reason for asserting the real existence of the physical eject arises, then, in view of the absurdity and irrationality of its denial. We assert it inferentially *because of our perception of the absurdity which would result from its denial.* Returning once more to the ink-bottle, I am able to say now that my assertion of its real existence is not without rational support. I assert the persistence of the ink-bottle during the interval when it is not symbolizing itself in perceptions, because of my immediate sense of the absurdity which would arise from its denial.[1] My knowledge is not baseless, but is an inference resting directly on negative data.

It may be objected, however, that this knowledge, even granting its validity, is a product of later reflection and is antedated in experience by our earliest assertions of the real existence of physical objects. This may be so, and it

[1] Of course it is open to say that there is an alternative to this which prevents its denial from being absurd, and this is the doctrine of re-creation. But re-creation assumes some energy of production outside of the object. If not, then it assumes the power of the object to re-create itself, which is of course to assume its persistence.

is clear that we are not yet at the end of our analysis. There is, no doubt, a sense in which even an ordinary dog learns to ascribe ejective reality to the things of his world, even to the point of distinguishing in some way between the mental and physical species. The dog learns to read the mind of his master, and this involves, in some vague sense at least, the knowledge that his master *has* a mind. The ordinary dog also learns to know the difference between purely physical objects, trees and stones, and those that are mental. His reactions upon the physical are different from his reactions upon other dogs or upon his master. A study of this primitive kind of experience may enable us to come upon what Professor Strong calls the original race-instinct which he conceives to be at the bottom of the business. We are not required to suppose that the dog, in distinguishing physical objects from other dogs and from men, or in reading the mind of his master, understands fully the *rationale* of the actions he is performing. In truth, there would be no exaggeration in saying from one point of view that he has no understanding at all of the reason of his conduct. But, from another point of view, he has an understanding. He has his dog-reason for treating a tree or a stone as a real existence which may be expressed as follows. He has no doubt as to the objective existence of these things, for that is given to him in his primary experiences. What he has to learn about them is their real existence; that is, their ejective nature. Were the dog capable of drawing inferences from simple perceptional data, it might be possible for him to reach some recognition of this reality by a simple comparison of his perceptions, after the manner of Mill. But we cannot ascribe such faculties of inference to an ordinary dog. We must presuppose a more impressive and startling kind of experience in the dog's case. He is, perhaps, pursuing some game which darts around or behind a tree or stone, while the dog in close pursuit dashes his head against the object. An experience or two of this kind would teach him

to respect the tree or the stone, that is, to treat it as something that has the power of resisting and hurting him, and his experience would also call forth his latent memory and association-processes, the result of which would be his power to recognize the tree or the stone as an object which would arouse certain experiences even before he had actually repeated the experience of their arousal. The dog would thus fill out the Mill-category by coming to regard the tree or stone not only as a group of present perceptions, but also as a permanent possibility of perceptions. However, he would verify the Mill-psychology in a way Mill did not anticipate. For the persistent possibility which represented the real existence to the dog would be a permanent possibility of certain vivid and painful experiences with which the tree or stone is immediately associated as the cause, while the object of the ordinary perception would be associated with this *real* object as the present symbol of its existence. And the dog's future conduct would prove that this is the state of his mind with regard to these objects; for, on perceiving them again as objects, even though in full cry after game, he will take the hint and avoid that form of collision which he has learned to associate with his former vivid and painful experiences.

Pursuing the experience of our ordinary dog still further, we find that he learns to react upon other dogs and upon his master in precisely the same way, but that the experience here is more complex than it was in the case of physical objects. He learns to respond to every movement of his master, to a whistle or even to a glance of his eye. The responsive relation becomes so complicated as almost to defy analysis. But in all cases we have the same situation repeating itself; the object symbolized in perception taken as representing a deeper reality with whose agency a complex of deeper and more impressive experiences is associated. The difference which the dog recognizes between physical objects like trees and stones, and a mental object like his master, is one that has its source,

not in any distinction which arises in the perceptional world between the appearance of trees and stones on the one hand and that of his master on the other, but altogether in a difference belonging to the sphere of the deeper and more impressive reactions. It is a distinction which belongs to things in virtue of that permanency of reactive agency which connects them vitally with the course and the fortunes of the dog's own life. Borrowing again the language of natural science, the dog's recognition of ejects as well as his distinction between physical and mental ejects is an experience which belongs essentially to that world of substances or forces which the phenomenal world symbolizes.

But even yet we have not quite reached the bottom of the dog's experience. We have found that his reason for recognizing the real existence of things is that they symbolize to him the permanent recurrence of certain interesting experiences, under certain conditions. Whatever behaves so will be recognized as a real existence in the dog's world. But we have not found as yet why the dog's presumption takes this particular form rather than some other. What the dog does, in fact, whether he understands his conduct or not, is to treat real existences as the persistent subjects of causal energy. They have the persistent power of producing effects and the dog, learning what these effects are, learns to classify them accordingly. But where does the dog come upon the norm of such an inferential instinct (if we choose to call it an instinct) as this? We can find no answer to this question until we recognize the fact that the absolute source of this kind of experience for the dog is found in his immediate sense of his own agency. His sense of his own agency, however vague it may be, will be sufficient to enable him to connect the reactions he makes upon the objective world with some persistent center of conscious activity within him. His consciousness does not need to be of a very high order in order to give him the norm of presumption with which he will

go out into the world. This presumptive norm, as we shall call it here, is the dog's guiding star in all his experiences of the world, and we are to suppose that his use of this norm will be a purely spontaneous use, one that is wholly free from what we would call thought or reflection. Now, we may not be justified in calling the thoughtless and altogether spontaneous use of such a norm, inference. It may be an abuse of language to say that the dog infers the ejective existence of his master. But he does a thing which has exactly the same form as inference. Shall we call this instinct, or would a better name for it be spontaneous reason? Some one has defined instinct as 'the doing of a rational act without any insight into its rationality.' If this be a true notion of instinct, the dog's conduct may be called instinctive. But the nature of instinct is in debate at present, the prevailing tendency being to reduce it to a principle of habit. There is, however, more than the habitual in the dog's attitude toward the real existences of the world. We have traced his experience down to its source in a vague sense of the form of his own agency. This agency would, no doubt, supply him with a norm for inference by means of which he would be led to posit a cause of his experience analogous to the self in his own conscious agency. If, then, we define an *instinctive* reaction as one that has its entire motive in *repetition* and *habit*, it is incumbent on us to regard the act in which the dog recognizes the real existent which his perceptions symbolize not as instinctive purely, but as one of spontaneous causal inference.

If, then, we permit ourselves to say that the dog-consciousness is capable of a certain spontaneous use of the self-analogy and that this supplies him with the norm of construction in the processes by which he reaches the recognition of the real existences of his world, we shall, perhaps, be able to answer another interesting question; namely, Which kind of eject, the physical or the mental, is likely to meet with the first recognition in the dog's

world? It is, of course, a debatable question how far an isolated puppy could go in the realization of a world. But taking the ordinary puppy which grows up in the society of other pups and dogs and people, the two facts (1) that the form of agency of which it is immediately conscious is mental rather than physical, and (2) that the most interesting part of its environment would be the living beings with which it is associated, lead to the presumption that its first knowledge of ejects would be of the mental variety. Learning the real agency of other puppies and dogs and of its master as it grew older, its first experiences of reality would be of a world of one species of agency, that of the mental type. But as its experience grew larger it would be led by the great differences which arise between the reactions of the mental and the physical, to recognize a distinction of type in the causes that occasion them. The recognition of the physical eject would thus appear later in the puppy's experience than would that of the mental.

The dog's experience has been taken here as a type because of its intimacy with the world it moves in and because little suspicion would arise here of the interference of higher powers of reflection. The processes are all functions of a spontaneous unreflecting consciousness, and we have found that the dog comes through them to the recognition of nearly all, if not quite all, the essential existents of the more advanced and reflective consciousness. The dog, it is true, knows his objects straight out without any definite conceptions of the nature of what he knows. Nevertheless, it is a real existence and not a bare symbol which he knows, a fact that is proved by his definite and appropriate reactions upon the world. Taking the case we have analyzed as a type, let us ask, then, how consciousness comes spontaneously to know (1) self, (2) objects which are symbols of the not-self, (3) ejects, (a) other selves, (b) physical ejects. How does consciousness spontaneously know self? At the very beginning of this inquiry we had occasion to draw a distinction between two species of knowledge, the

picturable and the unpicturable, and the knowledge of self was classified with the unpicturable species. What we mean by unpicturable knowledge is the assurance, immediate or otherwise, which we have of real existences which nevertheless have no definable form in which they can be represented, otherwise than symbolically, to the imagination. Thus, power, duty, love, hate, patriotism, are realities which we know immediately, but they cannot be pictured and are capable only of symbolic representation.

The knowledge of self is of this unpicturable variety, for while it is true that there are certain subjective categories, like individuality and personality, which help consciousness to conceive the self in specific ways, yet these are not picturable categories and do not represent the self to the imagination in any other sense than it is represented by calling it loving or dutiful. We have seen, too, that the knowledge of self is a function, primarily, of the spontaneous consciousness and is possible below the level of reflection. The dog knows himself, and this serves him as a point of departure for some very important knowledge of the world. If we ask what self it is the dog knows, we shall be led by the preceding analysis to say that it is his *volitional* self; the self of his prime agency; the self of that struggle of his to realize his destiny in his world. The very singular circumstance about the affair is that it is not the phenomenal self, the subject of mere perception, of which the dog becomes aware and which guides him in his reaction, but his deeper metaphysical self; the self that energizes in the efforts he puts forth for survival; the self of feeling and effort; the self that experiences the storm and stress of life. Through this *Sturm und Drang*, consciousness spontaneously apprehends itself in the form of a practical agent in pursuit of its own well-being. Its experience is thus metaphysical and it knows itself as a real existent rather than as a mere phenomenon. We say, then, that the self of the spontaneous consciousness is known immediately and metaphysically. The reflective

consciousness builds on the foundation of spontaneity, and though its processes are mediate and its business to translate its whole available material into the idea or conception of self, yet this result of reflection carries with it much of the immediate force of the spontaneous intuition. The intimacy of the self-idea with the self-intuition is so perfect that it is only when we compel ourselves to reflect critically that we are able to realize that the whole is not direct intuition.

Secondly, how do we come to know objects which are not self? We do little more here than sum up the results of former discussion. The general doctrine maintained throughout this treatise is that the cognitive processes proper do not take the initiative, but are called forth by the exigencies of the real struggle of the agent for survival. The dog did not perceive the real tree or stone until he ran against it and experienced the painful consequences. His cognition of the object then unfolded as a symbol of a deeper reality fraught with momentous consequences, and its function was to render the collision with the deeper reality avoidable. A dog does not know all this, of course, but it all happens just in that way. Recognizing this and calling the cognitive object which arises, the phenomenal object symbolizing a deeper reality, our concern here is with this phenomenal object. We wish to know how we became aware of its being a symbol of the not-self, rather than a symbol of self. Now, it has already been pointed out how the first definitions of the world arise as objective rather than subjective, and we have only to conceive this process as completing itself in order to reach a doctrine of objectivity that would be adequate to refute subjective idealism. For what subjective idealism asserts is not simply that our objects are bunches of perceptions, but that these perceptions represent nothing but modifications of consciousness. If, however, they have objective character from the outset and do not acquire it somewhere along the road, it is gratuitous to maintain that they represent nothing but modifications of consciousness.

We may not be able to find any objective existence which they can mean, but their pure objective character enjoins us from the exclusive subjective reference.

Nevertheless, while this is a sufficient refutation of subjective idealism, it is not the whole doctrine of the object. In our experience the objectivity of the phenomenon is inseparably bound up with its symbolic character. In calling the object a phenomenon we have virtually called it a symbol, and this connects its cognition with the deeper world which it symbolizes. How does the bunch of perceptions we call the object come to possess this symbolic character? We have already answered in our analysis of the dog's experience. It acquires its symbolic character through the mediation of the deeper experience of the dog, connecting him with the permanent substances or forces of the world. It arises, as we have seen, as a perceptual symbol of that deeper objective reality, and this, in the last analysis, grounds its objectivity and forever precludes the subjective interpretation. Let us call the phenomenal object a bunch of perceptions. Their very form as perceptions constitutes their obvious objective character. Our doctrine of the object completes itself when we discover further that this bunch of perceptions, by virtue of this objective character, stands as the symbol of a reality which is objective to the deeper self. Now the primary assertion of this is an affair of the spontaneous consciousness and it is on this primary datum as a basis that the reflective consciousness builds up its developed affirmation of the objective world.

We pass now to the consideration of ejects (1) of the physical type and (2) other selves. The eject in general is not a direct affirmation of the cognitive consciousness. The cognitive consciousness affirms the object directly, which, as we saw, stands indirectly as the symbol of the eject. At best, then, the eject is only indirectly asserted in the consciousness which defines the object. It is directly asserted only by the metaphysical consciousness in which

the active self approaches its world through its own agency. This approach gives rise to a metaphysical reaction, an experience of the frustration of agency which takes the form usually of a more or less violent rebuff. The cognition, as we saw, develops as a means of avoiding this rebuff, but the rebuff itself is related directly to a metaphysical object, an eject which the bunch of perceptions only symbolizes, but to which the rebuff has a direct reference. I do not mean to say that the dog, for example, has any idea of causation, or that he regards the cognized object as merely the symbol of a reality that does not appear. What I do mean is that as a hard fact it is not the cause of his bunch of perceptions which the dog takes to be real and is afraid of. It is rather the immediate cause of his unpleasant feelings when he experiences the rebuff, which he fears and avoids, though he does not clearly distinguish it from the cause of his perceptions. The merging of distinctions and the taking of the symbol as the real, even when the real is all the while meant, is a characteristic of the spontaneous consciousness. The physical eject stands, then, as the *immediate cause of certain metaphysical experiences of the self.* It is unpicturable except in terms of its objective symbol, but it is known to exist as the symbolized cause of certain experiences of the self.

Now the world of physical science is a world of existences corresponding to these symbolized physical ejects. Physics, as we have seen, resolves its world into phenomena and underlying grounds or substances. The phenomena are the symbols of the underlying substances or forces, while these are the hidden but uniform and stable forces which are causally related to the phenomenal effects. They are the ejects of the physical world, and the grounds on which science holds them to be necessary are identical with the grounds on which the reflective consciousness asserts the existence of physical ejects. The reflective basis of our knowledge here is an inference which takes the form of the *rationally necessary.* But this inference rests on

the more intimate and direct certitude of the spontaneous consciousness. That the physical eject exists as real we have the united testimony of both spontaneity and reflection. The definition of the character of this ejective existence is a matter of inference and analogy. To the dog its nature will express itself mainly in its dogged obstinacy in blocking his way. And being but an ordinary dog, his idea of the nature of the cause of his troubles will contain a great many kyno-morphic elements, just as that of the plain man will reveal elements which are anthropo-morphic. It is only in the critical reflection of physics that we find these elements carefully eliminated and the characterization reduced to the minimum of the necessary. What, then, does modern physics say regarding the nature of these physical ejects? As to their nature as *things in themselves,* it professes to know nothing. But in connection with its scientific aims it is obliged to regard them as the ground-causes of the phenomenal world. And while it is in a state of unstable equilibrium on the question whether these physical existences are to be regarded as matter, force, ether, or something beyond its present ken, there is no uncertainty as to whether some ground-causes of a physical character are essential; nor is there any doubt as to what the most fundamental attributes of these must be. If we call them matter, we put the emphasis on persistence, inertia and stability. If force, we then emphasize agency and causal energy. If ether, we accent the desideratum of a perfect medium for motion.[1] Physics thus defines its ejects in terms of strict inferential necessity, as persistent inert and stable substances; as mechanically acting causes and as perfect *media* for the initiation and propagation of motions. And it does this all consistently with its general profession of ignorance as to the

[1] If we suppose that the hopes raised by the discovery of radium and its properties are to be fully realized we have simply a nearer approach by physics than has hitherto been made, to that spring of spontaneity which it has from the first assumed.

nature of things. For these characterizations are not the results of immediate insight into the nature of the world, but are rather rational inferences from the world of phenomena regarded, as physics regards them, as symbolizing something deeper than themselves.

We come to the last of our classes of real existences, that of ejects which are other selves. How do we know the real existence of other selves? We have already alluded to Professor Strong's reference of our assertion of other selves to an original race-instinct and we have contended that an instinct which merely registered repeated experiences in the form of habit would not be adequate; whereas, instinct in any other sense would be identical with some form of spontaneous reason. If used in this latter sense we have no objection. The instinct which Professor Strong asserts would then be the immediate causal reference, by the dog in the illustration, of its metaphysical experience to a real existence which as a dog it does not distinguish from the bunch of perceptions standing as its symbol but which nevertheless means something entirely different from that symbol. The symbol is simply the object of the dog's perceptions, whereas what the dog cares for and means, is the thing which caused his rebuff. The experience as so far defined would be the same, however, whether the rebuffing thing be a tree or another dog, or a man. The distinction of the two species of ejects would arise in connection with a further process of characterization. Let us, in view of this, attempt a further analysis of the dog's experience. We saw how his idea of the nature of the thing which rebuffed him would be penetrated with kyno-morphic elements which his later experiences with physical things would tend gradually to eliminate. It is highly probable, however, that his first characterization would approximate much more closely to the nature of dogs than to that of trees, simply because the agent of the experiences is a dog. We here come upon what Professor Strong would no doubt call an original instinct of characterization, an

instinct the law of which might be stated as follows. *It is the primary impulse of every conscious agent to define the nature of other agents with which it interacts in terms of itself.* A distinction between agents which are rightly so characterized and other agents of a different kind will arise when the conscious subject of the experience has had experiences of different kinds of reaction. In some cases the reactions will be substantially like the reactions the agent himself is conscious of making, and in these cases the construction will stand. In other cases, however, the reaction will be different in marked ways and will lead to a modification of the original construction. Even an ordinary dog learns to distinguish between inanimate and animate things, and the human consciousness will be capable of carrying this distinction much further.

The knowledge of the real existence of other selves is thus deeply grounded in the immediate processes of the spontaneous consciousness. Proceeding on the foundation thus given, reflection develops the latent implications of spontaneity and draws out inferentially the idea of self. This idea, it is true, is largely the product of reflection, but the data of the reflective judgment are found in the spontaneous consciousness. It would not be an abuse of words to say that these data are the products of spontaneous inference. They are, moreover, so immediate and so implicated in the very foundations of our experience that to deny their validity would be almost tantamount to rooting up the foundations of the world.

Now we have seen that ejects are metaphysical reals. They are the terms into which the world of existences resolve when they are regarded as a system of agents exercising causal efficiency. We have learned, however, that metaphysics cannot stop with the notion of a plurality of world-causes as a final conception of reality. The world of existents could not achieve either unity or stability if the last terms in it were discrete and plural. We may postulate a plurality of idea-forces in the world and it will

be of no avail so long as we confine the outlook of each to its own movements. This difficulty will be only partially met by the notion of a plurality of forces which are able to take cognizance of their inter-relations. *The real unity of the world can be achieved only in some world-insight which takes thought for the whole.* On this universally valid metaphysical principle, then, that final meanings must be interpreted in terms of prevision and idea-purpose, the judgment is reached that the grounding of individual forces and agents in some principle of unification as a whole so that our world may in a real sense be one world, points by direct necessary implication to some unitary spring of prevision and purpose from which the existence and reality of the world as a whole may be intended and realized. This is the metaphysical case for an absolute. The whole strength of the link that binds our consciousness to an absolute will be appreciated, however, only when we correlate the dictum of reflection with that of spontaneity. The correspondent of the absolute in the spontaneous experience of the man, and perhaps of the dog, is to be found in the religious consciousness which relates the man or the dog in apparent immediacy to some awful and mysterious power which becomes partially intelligible to him through the analogies of his own being, but also looms transcendently beyond the limits of his conceptions. The God of the savage, as well as of the civilized man, is a being of this kind, grasped in what Professor Strong would call a primary instinct, and in what we have preferred to construe as a spontaneous metaphysical inference of the causal species. I mean metaphysical causation, of course; the operation of that agency in the world which brings its deeper reality to light. It is not probable that the savage or the civilized man would locate a transcendent power in the world, if his experience had not made him aware of effects which he found himself unable to ascribe to ordinary agencies. He must feel himself in presence of a causality that looms beyond the furthest reach of the ordinary

causes he knows before he can have the impulse to put a religious construction on his experience. The religious consciousness of the dog, so far as he may be said to have any, will develop out of his relations with his master, in whom he will find along with much that is akin to himself, a mysteriously transcending power of compassing results that is baffling to his highest intelligence, while the results themselves will be only partially intelligible. That the dog regards his master as a transcendent being exercising an agency that is largely mysterious and incomprehensible, and that his feeling toward his master is akin to religious in its type, there is little reason to doubt.

Combining the spontaneous link with that of the reflective consciousness, and identifying the God of the rationally developed and reflective religious consciousness with the absolute of metaphysics, the reason will be apparent for that intimacy of relationship with God which the normal human being feels and which precludes him from translating his assurance into terms of inference merely. Just as he declines to hold the existence of other minds on terms of mere inference and seeks grounds for it in the depths of his spontaneous experience, so here he is not satisfied with the effort to translate assurance of God into threads of logical inference but, following a profound impulse, seeks in the depths of his metaphysical interactions with the real world for the secret of that assurance. And we do not doubt that the leading has in it more than the mere blind reaction of habit.

We have seen that existents may be classified under several heads as follows: (1) the self or the subject which knows and experiences its world, (2) objects of perception which we call phenomenal existents and which are taken to be symbols of deeper and more real existents called ejects. These are further distinguishable as physical and mental ejects, the former constituting the stable substances or forces of the physical world which are connected with the symbolizing phenomena as their causes, while the latter are

other selves with which the subject self becomes acquainted through the combined activities of its spontaneous and reflective consciousness. Lastly, there is the great eject which we call God or the absolute, in which the system of existents culminates and which stands related to the world of existents as the metaphysical spring of their stability and unity.

CHAPTER V.

PRIMARY CERTITUDE.

In discussing the topic of this chapter it is important that a distinction be recognized at the outset between what may be called primary certitude and the species of certitude which pertains to validity.[1] For we may discover in some cases that what is certain in the primary sense may not prove to be valid, and on the other hand that some things not primarily certain may be proved to be valid. We are interested here mainly in the primary tenure of our judgments. Regarding primary certitude we have to consider its species and the forms in which they embody themselves; or, stated differently, the kind of tenure by which they hold their content of reality. The most fundamental line of cleavage arising in the department of certitude is that which separates knowledge from belief. It is well-known that many of our judgments, even of those that are most certain, do not rest on a basis of full cognitive evidence. Such judgments will be either instinctive, expressing a certitude founded on habit and repetition, or they will be judgments of belief. Let us neglect for the present the instinctive judgment for the sake of the judgment of belief, which we shall proceed to analyze. The supposition, which is widely current, that the belief-judgment as such differs from the cognitive

[1] The discussion here is confined mainly to primary certitude, validity being only indirectly and incidentally dealt with.

judgment only in degree, is at least doubtful. There is a qualitative difference in the data of a belief-judgment which constitutes a difference of kind between it and the cognitive species. In another work more detailed consideration has been given to the distinction between knowledge and belief[1] and the conclusions there reached will to some extent lighten the task of the present discussion.

We made the point in that work that there is an important qualitative difference between the two species, consisting in the larger part which is played in the belief-judgment by the will. A belief-judgment on its subjective side carries with it, as we saw, the consciousness of having been determined, to some degree at least, by considerations of practical interest or value; so that there will always be a point of view from which the believer will be aware of asserting his truth because of its relation to some good. In short, whatever cognitive data may be available, a belief-judgment will persist as a belief-judgment so long as the determining consideration in asserting it is one that arises in view of its practical value. Moreover, this subjective difference points to an important distinction of an objective character. The fact that our judgment rests partly on practical data indicates a deficiency in its theoretic basis. The cognitive, or as we shall call it, the theoretic judgment, rests in the last analysis, on grounds of immediate apprehension, or, on those of rational necessity, and it is by virtue of the immediate basis to which it is reducible that the theoretic judgment asserts itself with coercive authority, leaving to the mind no option but to accept. The judgment of belief is lacking in this objective necessity and we are always conscious of being left the option to dispute it, or at least to withhold our assent from it, and this option will be found to survive even in connection with the strongest assurance of the truth of our belief. The judgment of belief may be defined, then, as one that in the last

[1] See *Foundations of Knowledge*—Chap. *Knowledge and Belief.*

analysis is determined by practical rather than by theoretic considerations; whereas, a theoretic judgment is definable as one that rests, in the last analysis, on immediate apprehension or objective rational necessity. We do not mean here to exclude theoretic considerations from judgments of belief, or practical considerations from theoretic judgments. The point of our contention is simply this, that when we come down to the determining motive, the "holding turn" so to speak, we find that in the case of the belief-judgment, it is practical, while, in the case of the cognitive judgment, it is theoretic.[1]

Taking this distinction between theoretic judgments and belief-judgments as representing a fundamental line of cleavage, the problem of *species of primary certitude* resolves itself into that of the different kinds of assertion which arise under the two species, theoretic judgments and judgments of belief. Assuming, then, that the characteristic feature of a theoretic judgment as distinguished from a judgment of belief is to be found in the fact that the balance in favor of assertion is turned, in its case, by a theoretic rather than a practical motive or interest, we are in a position to deal rationally with the question of the various species of certitude which arise and are germane, (1) to natural science, (2) to metaphysics. In the field of natural science, inasmuch as its method is purely objective and involves the indifference of the world it deals with to the nature or interest of the observer, we shall be prepared to find that the theoretic is the only species of judgment it can accept as legitimate, while all affirmations of belief must, as such, be rigidly excluded. We do not mean that the scientific investigator may not entertain judgments of belief, or that these may not be found valuable sometimes as suggesting fruitful lines of inquiry. We

[1] For cognitive we might substitute the term *theoretic,* while for the belief judgment may be substituted, *judgment of value.* The distinction turns substantially on the difference between theoretic considerations and considerations of value.

only mean that a judgment will not possess scientific value unless its determining considerations be theoretic. Excluding the belief-judgment, then, we have left the theoretic form as alone possessing scientific value. The certitude of this species of judgment is traceable, in the last analysis, as we saw, to a basis of either cognition or rational necessity. Let us classify the theoretic judgments, then, into two groups, judgments of cognition and judgments of rational necessity. The cognitive species will be found to rise out of data of immediate apprehension and may be called *intuitive,* while to the judgment of objective necessity we may apply the term *rational.*

What, then, are the forms of certitude which arise in connection with these species of judgment? The intuitive judgment is one that will be found to cover the fields of mathematics and the purely empirical processes of physical science. We have called the judgment intuitive, a designation which will require some explanation. *We call that intuitive which is immediately present in consciousness, whether in the form of perception or conception.* The object of perceptual apprehension is, of course, the observed fact, and a judgment founded on perception may, therefore, be called *factual.* The object of a conception is not ordinarily called a fact since the conceptual function is more active than that of perception. Let us for the sake of distinction call the conceptual equivalent of the fact a *construct.* The judgment which is affirmed on conceptual data may then be called *constructual.* Intuitive judgments thus resolve themselves into the two sub-species *factual* and *constructual.* And ranging the species in order, we arrive at the trinity of judgment forms, *factual, constructual,* and *rational.*

Now a strict observance of the order of experience would no doubt give the factual judgment precedence in this discussion. But the fact that we have already divided our world of knowledge into mathematics, physical science and metaphysics determines the question of priority in

favor of the judgment of mathematics. What species of certitude are we concerned with, then, in mathematics? Those who, like Hume, attempt to ground mathematics exclusively in perception would answer, the factual. But this reply would meet a formidable obstacle in the fact that the mathematician never makes his direct appeal to facts of perception at all. His diagrams and figures are symbols which represent approximations but never exactly the thing symbolized, which is a *conceived* angle, straight line, curve or dimension. His numbers do, of course, exactly express the things they are meant to represent, but the objects of number are conceptual and not perceptual. The immediate terms of mathematics to which direct appeal is made are constructs rather than facts of perception. The mathematical judgment is reducible, therefore, to a basis of intuition proper, rather than to one of fact. It is the intuitive type of judgment par excellence. Bearing in mind now that the intuitive is the immediately present either in perception or conception, and that the immediately present in conception is a construct rather than a simple fact, we are ready for the conclusion that the certitude of mathematics is of the species we have called constructual. It is a certitude which arises in the first instance in connection with those elementary concepts of mathematics which embody for the science its notions of lines, points, dimensions, and numbers. These are the data used in its definitions and axioms; a definition being simply a formula that states the way in which the mathematical imagination would conceive (ideally draw) the term in question, while an axiom is a statement of the most obvious relations which arise out of a comparison of the definable terms. It appears, then, that whatever the Humian may say as to the first data of mathematics, the fact is not to be disputed that the mathematician never makes his direct appeal to data of perception, but always to data of conception. Lest this position should be still regarded as disputable let us consider further the nature

of the mathematician's data. We have seen that he deals with points, lines, angles, curves and numbers. But the reduction of any of these terms to perceptions destroys their mathematical character, for no one ever had a percept of any of these terms which corresponded exactly to the definition. The straight line is found not to be straight; the angle is not a perfect angle and the point is found to fill up a lot of space. The perceptions in mathematics are clearly not the terms themselves, but symbols of them and symbols in a very peculiar sense. The perception in physics symbolizes a deeper and causal reality, but cause does not enter the field of mathematical conceptions. The determining category is that of equivalence. Now the perception in mathematics is a symbol of equivalence. How can this be? Clearly by manifesting the character of *approximation.* Mathematical symbols owe their symbolic character to the fact that they are approximations in the perceptual world to exact quantities which cannot be perceived. These quantities are conceived, that is, mentally drawn, in a conceived medium, and it is these mental products which are roughly draughted out and symbolized in perceptions. The mathematician knows that his perceptions will mislead him if he takes them for anything but approximations to his real data, which were never on sea or land. The basis of mathematical certitude will be found then, not in factual, but rather in constructual intuition. The primal certitude arises out of the fact that the mathematician conceives his primary terms in their immediacy. Now I conceive that it was this form of constructual intuition which Kant called *pure intuition* and which he laid at the foundations of mathematics, only Kant did not distinguish this clearly from perception. Rightly enough, we think, he regarded space and time as forms of perception, but as such they are not as yet the pure intuitions of mathematics. The space and time of perception are plural and fragmentary though homogeneous, and it is no doubt to their homogeneity that is due the falling

together of the fragmentary spaces and times into a seamless continuum. But this seamless continuum is not yet a pure intuition. The pure intuition is a notion of exact quantity and it already has the prerogative of a rational universal; it dictates the form to perception. Why should perceptual space and time be clothed with this prerogative? Clearly in space and time perceptions it would be a great impertinence and the empiricists would be right in indignantly driving it away. Pure intuition is already space and time mentally constructed and therefore ideally exact and in a position to dictate the law to perception. In short, in saying that mathematics rests on data of pure intuition, Kant concedes that it rests on conceptual data.

In reaching this conclusion we have advanced a long way toward the determination of the nature of mathematical certitude. It is a certitude which springs primarily from *pure concepts of quantity.* Such certitude is immediate because it arises directly out of the terms themselves, which the mathematican uses, and has no ulterior reference. And its character as indefectible or apodictic certitude is due to the nature of these terms. They are absolutely exact and invariable. What is seen to be true about them is seen, therefore, to be absolutely and invariably true. In mathematics there is no variableness or shadow of turning. Now, these original constructual data are the correspondents of facts in the physical sciences. Physics generalizes the phenomena presented in perception by means of the recurrence of the *same* among *differents.* What, then, will be the equivalent of physical generalization in mathematics? Plainly enough those results beyond the field of immediate data, which are obtained by a comparison of intuitions. This comparison is made possible by the mediate use of exact equivalents which give the intuition of two quantities as exactly equal to the mediating quantity. This comparison leads from the step of *intuition* to that of *inference.* That these quantities are exactly equal to each other is not an intuition; it is not immediate-

ly obvious, but it is an absolutely exact and invariable inference.

We have here come upon the type of ordinary mathematical reasoning which will be found reducible in all cases to this form of inference. The exact equivalence of quantities to a given quantity leads to two intuitions and the comparison of these intuitions leads to a different kind of a step which we call inference. Having found that the species of certitude we call mathematical springs from the exactness and invariableness of the terms used, we find that the same thing holds true of mathematical inference. It is a conclusion founded on the comparison of terms of exact equivalence, and hence, it carries with it absolute certainty. We cannot call a conclusion of this sort one of rational necessity. For while it is no doubt necessary in the highest degree, this quality springs directly out of what we may call an intuition of the equivalence of relations. We do not say that the exact quantitative equivalents of a third exact quantity must be equal to each other; we say that they *are* equal to each other, and this because the inference is one that rests directly on the equivalence of intuitions. The question whether any other species of certitude arises in the field of mathematical judgments is one the answer to which depends on the prior question as to whether the direct and mediate intuition of equivalence exhausts the possibilities of mathematical calculation. This we do not believe, for is there not a whole field of genuine mathematical calculation in which results are reached by taking the terms of one kind of quantity as symbols of approximation for reaching judgments about another quantity of a different kind? This process will enter wherever the relation is one between a finite and an infinite quantity. Between the notion of the finite and that of the infinite there is a difference of quality, since the finite is always greater than any of its parts and equal to the sum of its parts, whereas any of the parts of the infinite may be as infinite as the whole. In calculating an infinite series, however, the only method

possible is to ignore this difference of quality and employ in connection with a finite process a quantity which stands as a symbol of approximation. Let it be supposed, then, that the finite process has gone on to n terms; we may represent the next step under the symbol x as the point of vanishment where the distance between the finite and the infinite disappears. Now this does not reduce the judgment in which it is asserted to either direct or indirect intuition. But it carries with it the certitude of the highest type of inference. The whole certitude of mathematics rests, therefore, on a basis of conceptual intuition.

The primary certitude of physical science is *factual.* It arises out of the fact that a physical process starts with the immediacy of perception. The phenomena that constitute its data are bunches of perceptions. Out of these science selects its recurrent terms and on them bases its generalizations. In this part of the process of science the aim is to discover the real uniformities among indefinite differences. All phenomena may be translated into dynamic terms of motion. Generalization lays hold of motions which are uniform and states the law of their uniformity. Thus if it be found that iron-filings behave in a uniformly opposite manner when exposed to the positive or negative pole of a magnet this conduct will be statable in terms of a general proposition which in science is called a law. Now the certitude of these general propositions is still factual inasmuch as it is an observed uniformity in the behavior of facts which the proposition embodies. Factual certitude arises out of the immediate presence of the factual data in consciousness. We have seen that the objects of physical investigation resolve themselves into phenomena of this immediate kind. But the objects of science, the terms given in bunches of perceptions, are symbols of something deeper which does not immediately appear. The phenomena are everywhere connected with underlying substances or forces of which they are conceived to be effects. And we have seen that science does not

become completely rational until it has grounded its phenomena in these deeper realities. But, the factual certitude of the symbol does not extend to the thing symbolized. Like the terms of mathematics these deeper realities never appear in the immediacy of perception. Nor yet do they appear as conceptual intuitions. On what tenure, then, are they asserted? On grounds of *rational necessity,* but a necessity of a peculiar kind. The assurance of physics rests in part on the necessity that its phenomena shall be stably grounded. This is a necessity of reflection and expresses a fundamental demand for rationality. But this is not all. We have seen how the reflective demands for an absolute are strengthened by data from the spontaneous consciousness, and here the situation is substantially the same. The dynamic experience of conscious agency brings to light the eject, or real object, of the physical type, and it is to this *eject* that science pins her faith. The phenomena of the world are symbolic effects of deeper realities which are connected with them by the relation of natural causation. This means that the world of physical realities is a world of causes and that phenomena are related to these as effects to underlying causes. Now the nerve of causation in general is found in the requirement that the world of changes or happenings, which is a world of effects, shall be connected with a world of agency or agencies as the necessary spring of its existence. This is an altogether primary form of necessity, not derivable from anything more ultimate than itself, but standing in its own right. Into the texture of physical science, then, there enter two different species of certitude, the one factual securing the first data in the certitude of sensible intuition. But the law of science in the deeper sense, as Mill has demonstratively shown, is not a mere formula of sensible intuition. The sensible world is the phenomenon of a deeper world of physical realities which it symbolizes but does not characterize. The certitude of this deeper world is one of rational necessity, and the certitude of

physics, in so far as its processes include the deeper realities, is one of rational necessity. It is not intuitively revealed that the sensible world is a symbolic world or that its symbols point to deeper physical realities, but it is none the less certain that this is true, since the link which binds the symbol to the symbolized is as primary as intuition itself.

Beyond mathematics and physical science what certitude is left for metaphysics? The answer can be found only by investigating the kind of objects and processes with which the metaphysician deals. Now we have found that physics deals with realities which lie deeper than the sensible world and which the sensible world only symbolizes. This assertion of the deeper realities, the physical ejects, which is so fundamental in science, might be regarded as a metaphysical element in science. Nevertheless, we prefer here to regard it rather as a common ground or meeting point for both physics and metaphysics. We have seen already that the point in the physical conception of the world on which metaphysics lays hold in order to effect its own transformation, is its notion of a ground of phenomena, its doctrine of underlying substances or forces. We may take this notion of ground which physics construes in terms of the physical eject as supplying at the same time the terminus of physics and the point of departure for metaphysics. We may ask, then, where metaphysics obtains the additional insight which makes this departure possible. And the answer will be, (1) in the mental ejects, the real existence of which it finds reason to assert, and (2) as its most important and primary source, in the self of the deeper metaphysical experience. That we have grounds for asserting the real existence of mental ejects has already been concluded. The deeper world thus contains two kinds of existents, physical and mental ejects, and the metaphysical problem arises directly as the question of their relation. Physics will tolerate no mental interference with its physical agents and its right in this

must be admitted. But conceding this, the mental type of agency suggests the question whether we have not here the norm of a more ultimate conception of things than that on which physics proceeds. Out of this hint arises the whole endeavor of metaphysics. But as we have seen, mental ejects are partly analogies of the self-agency which we know directly in our own conscious experience. Our starting-point for the assertion of their existence is found in the consciousness of our own agency, and the ground-certitude of metaphysics will be to seek, therefore, in the *certitude of self-existence.* In regard to this, if we observe the distinction between picturable and unpicturable existence and do not fall into the mistake of denying that the unpicturable is knowable, it will be clear that the tenure on which we hold the existence of our metaphysical self is one of our primary certitudes. And since it has the immediacy of intuition we may call it unpicturable intuition. It has in it something like the immediate touch of sensation and like sense-intuition it is not resolvable into anything more simple than itself.

I am not speaking here of the *bare* existence of self, but rather of its concrete existence: that self-agency as a concrete fact of which we are immediately aware in terms of the inner consciousness. The certitude of the existence of the metaphysical self is equal, then, to any form of certitude; it exhibits the immediacy and the coercive force of intuition and may be ranked as a certitude of the intuitive species. The first certitude on which metaphysics rests is, therefore, our certitude as to the real existence of self-agents in the world. We have intuitive certainty regarding our own self-agency; while regarding other selves we have a certitude equal to that of physics in regard to physical agents. We might say stronger, since self-agency is the only form of agency which we immediately know, and science only reaches its physical agents by stripping off some of the attributes of self-agency while others are suffered to remain. This basal certitude of

metaphysics regarding the real existence of its type of being is even greater, then, than that of physics regarding the world of physical existences.

But metaphysics does more than assert the real existence of mental agents in the world. It takes its most characteristic step in asserting that the final meaning of the world will be determined only when it is interpreted in terms of agency of the mental rather than of the physical type. And this leads to the final category under which metaphysics conceives the world, that of idea and reality. What kind of certitude, we may ask, are we to ascribe to this interpretation of the world? It is here, of course, that we come upon what is most characteristic of metaphysics, its reduction of the world to terms of conscious agency. What species of certitude attaches to such interpretation, and if it be genuine why is it not universally recognized? In regard to the latter part of this question it is clear that the value one attaches to the metaphysical interpretation will depend directly on the value he already ascribes to mental existences. If these are not regarded as real but only phenomenal or epi-phenomenal, it will follow logically that they cannot be taken as models for the interpretation of reality. In case they are valued as real existences, then it is logical that they should be taken as models for the final interpretation of the real. The only other alternative here would be materialism, and the metaphysical ground for rejecting materialism and taking consciousness as the type of ultimate reality is found in the fact that a material agent cannot give final meaning to its world, whereas a conscious agent exercises that prerogative by connecting the world activities not simply with efficiency but also with ideal foresight and purpose. It is because some final meaning of things is rationally required while no other kind of an agency than a mental or conscious one can satisfy this demand, that certitude attaches to the metaphysical interpretation. The certitude here is not intuitive, of course, nor is it of that species of rational

necessity which rests on natural causation. It is, nevertheless, a *form of rational necessity;* one that rests directly on the principle of teleological or final causation. It may be said, then, that the certitudes of metaphysics are of two species, (1) that by which it holds to the reality of mental existences, and (2) that which attaches to its interpretation of the world in terms of mind.

In the first paragraph of this chapter we distinguished between the certitude of knowledge and that of belief. Up to this point we have been exclusively engaged with the species of certitude which fall under knowledge. Belief differs from knowledge, as we saw, in that its deciding consideration is a practical rather than a theoretic datum. Now there are three questions regarding belief which we wish to consider briefly in closing this chapter: (1) what is the real difference between a practical and a theoretic datum, (2) what certitude attaches to the belief-judgment, and (3) what is the place of the belief-judgment in a metaphysical scheme? In order to determine the difference between a practical and a theoretic datum it will be necessary to distinguish between a practical and a theoretic end. The aim of the theoretic activity is to interpret and understand the world: in short, to translate it into terms of meaning; that of a practical activity is use, appropriation, enjoyment: in short, the translation of the world into terms of good. We do not ordinarily use the term *value* in connection with meaning, but rather in connection with good. Things have value in proportion to their efficacy in contributing to the good. Now the good may be expressed in ultimate terms of satisfaction. A datum which makes directly for satisfaction will be practical rather than theoretic, while a datum which makes directly for meaning will be theoretic rather than practical. It is true also that the practical datum may have an indirect reference to meaning, while a theoretic datum may make indirectly for good. But it is only the direct reference that counts in

determining whether the datum in question shall be classed as practical or theoretic.

What certitude attaches, then, to the belief-judgment? In the first place, we wish to make clear that we do not mean practical certitude—the certainty that it is a valid condition of the good, but rather theoretic certitude—the certainty that it also expresses part of the reality of the world. It is clear that the practical judgment may have different grades of theoretic value. We narrow our inquiry here down to the question, What is the highest theoretic value a belief-judgment can have? and we would answer that it attains its highest value when it stands as *a real postulate of what Kant calls the practical reason.* Let us suppose that something is so related to a scheme of rational good that its non-existence would destroy the rationality of the scheme. There would be a ground of rational necessity arising out of the relation of the datum to the system of good, for asserting it, and it would be affirmed with a strong degree of certitude. The nerve of the necessity would be found in the insight that its denial could not de-rationalize the system practically, without making a breach also in its theoretic meaning. On this ground its truth would be asserted on the basis of *practical necessity.*

The following considerations bear on the question of the metaphysical value of the belief-judgment. Science rejects the belief-judgment because it is teleological in its form rather than mechanical. This, however, cannot be a ground of objection to its metaphysical use since metaphysics is teleological. The only question here is whether belief presents a form of certitude which entitles it to metaphysical credence. Whatever the truth may be regarding lower forms of belief, it cannot be doubted that the belief-judgment which rests on practical necessity possesses a certitude which entitles it to rank alongside of other metaphysical forms. Some, if not all, of the judgments of metaphysics

may legitimately take the form of postulates of practical reason.

The truth is, there are strong reasons for regarding the metaphysical judgments as in general forms of the judgment of belief. But they are belief-judgments of a special type and find their analogues in the Kantian postulates of practical reason.

In fact, if Kant's insight had been surer at this vital point in his system he might have made out a stronger case for his postulates than he was in fact able to do. At the same time he might have indefinitely strengthened the foundations of his metaphysics. Let us consider the type of problem with which he was dealing in the metaphysical section of his critique. It was precisely the question whether or not the judgments in which we affirm freedom, immortality and God, are theoretically certain and, therefore, demonstrable, as rationalism had assumed. And Kant's conclusion, from which we do not here demur, was that the theoretic data are not sufficient in themselves to ground an assured judgment. From the standpoint of pure theoretic knowledge, then, these issues remain problems which reason can state but cannot solve. The reason was that no "holding turn" could be found in experience for translating them into real judgments of existence. Kant therefore gave up the theoretic case as hopeless. From the standpoint of practical reason, however, he came upon these same issues, and here by means of their moral value they were able to take a vital hold upon experience. As a moral subject man is more than a creature of sensibility. He is real up to the measure of his duty, and this measure includes freedom, immortality, and relationship to God. In other words, as a bearer of moral demands man becomes a real spiritual agent, and his judgments as organs of spiritual values become authoritative and supply solutions to the theoretic problems. Now Kant's work here would have been in a great measure satisfactory had he reconsidered the whole question of

metaphysics at this point in the light of the combined theoretic and practical data. No doubt, had he done so, he would have seen that it was not necessary to leave his judgments standing as pure postulates of the practical reason, but that they have also strong theoretic support. This theoretic ground can perhaps be indicated most clearly as follows. Kant's method of deducing the ideas of metaphysics from the forms of the syllogism, to a great extent blinded him to the fact that underlying this whole use of reason are the analogies of selfhood, and that it is only by using the type of reality supplied by self-experience, that reason is able to find the principle for the ultimate unification of the world. In spite of this, however, he recognizes that in these ideas of reason we have the ideals which reason holds before the mind as models of perfection. It is with Kant as though reason should say, "these ideas represent what being would be if the best became real." Now, of course, the best is the most rational, and this Kant recognizes in his contention that it is rationally necessary for the mind to conceive the system of things as completing itself under these categories; only, he is not ready to adopt the principle that the rationally best is real. Nor are we ready for that. But Kant has reached his conclusion on the basis of general theoretic considerations. These represent the rationally best and most perfect world. Let us take this result, then, which reason affirms on the principle of self-analogy, and we shall find that it justifies us in saying that the metaphysical judgments are in the highest degree rational. Let us, then, with Kant, investigate, not simply the ethical consciousness, but the whole practical side including the aesthetic and religious interests; in fact, the whole field and scope of values, in order to find, as he finds, a principle which will assert the full measure of these practical values as a whole, and not simply the value of the moral. When we have achieved this, what will be the nature of our results and how, if at all, shall it be permitted to modify our theoretic con-

clusion? The answer with which we close here will be in two parts. In the first place, just as Kant brought to the support of his postulates the full force of moral *necessity*, so we may bring to the support of the metaphysical judgments the full force of *practical* necessity in its broadest and richest sense. In short, we may formulate our principle as that of *ideal good*, and just as to the Kantian the denial of his postulate means the death of moral good, so to us the denial of the metaphysical judgments means the death of ideal good, and consequently the fall of the whole world of good into the perdition of irrationality. If the denial of the metaphysical judgment means the perdition of man's ideal interests and good, there is the very highest motive supplied for the *will* to believe. On the final question, then, as to how, if at all, this result is to be permitted to influence our theoretic conclusions, a very brief statement will suffice. If the rationally best is also the best practically, it would seem that we are not left wholly to the tender mercies of either the rationalist or the pragmatist. The practical consideration of value supplies the strongest kind of a motive to conviction; but on the other hand the judgments are theoretically reasonable in the highest degree. Are we not in possession of two strings to our bow instead of one, and if our judgments be theoretically reasonable on the one hand, and on the other hand, practically necessary, may we not weave the two strands together and find a support for our conviction that shall be adequate?

If we call this completed conviction *rational belief* and claim it as the distinctive feature of the higher judgments of metaphysics, the species and grounds of metaphysical certitude will have been made clear and also the true basis of a rational synthesis of metaphysics and natural science.

PART II

SYNTHESIS

DIVISION A

FROM PHYSICS TO SOCIALITY

CHAPTER I.

THE DIALECTIC.

We are now confirmed in the belief that in dealing with the same world of experience a real distinction arises between the procedures of natural science and metaphysics. We are also convinced that a notion of metaphysics which would represent its method as simply an extension of the concepts of science beyond their ordinary limits would leave out its most characteristic features. There are two real and distinct standpoints in experience from which consciousness goes out in its effort to realize the world, (1) the inner and more essential standpoint of intelligent agency, and (2) the more external standpoint of ordinary observation. The first of these is that of metaphysics, the second that of natural science. Correlated with these different standpoints are two opposite presuppositions about the objects of investigation. Metaphysics, which identifies itself with the consciousness of inner agency, sets out with the presumption of a community of nature between subject and object, or between consciousness and the world; while natural science, identifying itself with the outer observing consciousness, just as naturally sets out with the presumption of indifference of nature between the investigator and the world. Again, it has been found that the central principle of natural science, that which determines the dynamic relations of the parts of the world, is natural causation, a principle of non-previsive agency whose effects are re-

garded as the phenomena of efficient forces which act without mental foresight. The corresponding principle that stands central in metaphysics and defines the mode of its agency is that of *idea-purpose*, a principle whose results are to be regarded as the fulfillment of previsional intention. We call any method or procedure mechanical in which natural causation is the central determining principle, while to a method in which the principle of ideal prevision or finality is central we apply the distinguishing designation teleological, and throughout the discussion these terms will be used in the sense here indicated.

Let us then attempt to state the two methods of natural science and metaphysics in such a way as to bring out their real connection. In the first place, the fact must be admitted that the two methods though clearly distinguishable are not absolutely separable. It will be found that natural science in all its proceedings clings to a latent recognition of an inner nature of things which it regards as unknowable, but at the same time essential to reality. Natural science is not founded on a denial of the inner nature of things, but simply claims the right to neglect this nature in the attainment of its own results. And the truth is that this neglect is only relative. There is an important sense in which it becomes necessary for natural science at a certain stage of its development to recall for revision its presumption of the unknowability of the deeper nature of things. And the point where this revision becomes necessary arises in connection with that period in the growth of natural science at which it begins to respond to the demand that its empirical results shall be rationally grounded. The scientific impulse, if it be genuine, will not rest content with the simple spelling out of the uniformities of things, but is foredoomed to ask the question as to the grounding of the phenomenal in a deeper system of realities. We have seen how this question leads natural science to the real ground-category of its world; the notion which connects the observable movements of things with deeper and more

abiding substances or forces to which they are related as phenomenal effects. Now it is in the development of this notion, which is very clearly necessary, that the revision we have alluded to takes place. We shall ask and try to answer two questions here, (1) What is the nature of this revision, and (2) To what extent does it make the foundations of natural science metaphysical? The answer to the first question is found in the doctrine of underlying substances to which natural science commits itself in its theories of matter, force, ether or even of something more refined still, if that be possible. The need of underlying substances arose as we saw from the requirement that the movements of the phenomenal should be more stably grounded, and the fulfillment of this requirement in the doctrine of underlying substances led to a transformation of the foundations of science. Phenomena could no longer be regarded as themselves full-fledged reals, but became symbols of deeper realities. These were the substances which science construed in its theories of matter, force, ether, etc. Let us apply the one term *materiality* to these substances and let us understand by materiality a term of characterization which directly qualifies the deeper nature of things in such a way that negatively it excludes the characteristics of mental agency, while positively it includes only the ascription of such qualities to this nature as are essential to the production of effects in the phenomenal world in accordance with the form of agency embodied in the principle of natural causation. A history of the progressive revisions to which science has submitted its doctrine of materiality would bear out the truth of this statement. We answer the first question, then, by saying that natural science recognizes the deeper nature of things just so far (and no farther) as it is forced to do so in order to ground its principle of natural causation and that the limit to which it may go in positively qualifying that nature is determined by the same consideration. This conclusion will take away some of the difficulties from the second

question,—to what extent the doctrine of materiality makes natural science metaphysical in its foundations. Strictly speaking we should have to say that the revision is not at all metaphysical, inasmuch as it excludes from its foundations the kind of agency that is distinctly metaphysical; and this answer will have to stand at its face value. The physicist's doctrine of materiality does not transform him into a metaphysician and he may take courage and go forward. But it does bring his whole point of view into more friendly relations with metaphysics. Metaphysics rests on two fundamental judgments, (1) that things have a deeper, hidden nature, and (2) that this nature is essentially mental and previsional. The revision of natural science leads it to assent to the first judgment. This establishes a point of community, the assertion of a deeper world-nature which each treats in its own characteristic way. We should answer the second question, then, by saying that while the revision establishes common ground between natural science and metaphysics, it leaves the field of real vital distinction untouched. The whole method of natural science is determined by its principle of natural causation in which is defined the kind of agency it will admit into its world. On the other hand the type of metaphysical agency we have determined as that of finality.

The problem here will be that of restating the two methods of natural science and metaphysics in the light of these later conclusions. Natural science having arrived at the point where it no longer regards the phenomena with which it deals as separate existences, but instead, as symbols of a hidden and more real nature which they do not reveal, nevertheless asserts this hidden nature as the necessary grounding of the phenomenal and connects it with the phenomenal by means of the principle of natural causation. This principle of natural causation embodies the type of agency which excludes mental characteristics and gets its results by means of efficiency without mental guidance or idea. As thus defined the method of natural science is

plainly *mechanical*. Metaphysics, on the other hand, setting out from this common ground, the postulate of a deeper nature of things of which the world of perception and observation supplies symbols, asserts the identity of this inner nature with the inner nature of consciousness, that nature which is revealed in the central effort of consciousness to overcome and realize the world. Having asserted this identity of nature, metaphysics translates the agency of this inner nature into terms of that deeper agency which operates centrally in consciousness, and this supplies the norm from which it develops its central principle, that of finality or previsional and purposive causation. So defined the method of metaphysics is clearly *teleological*, and in this discussion the terms *mechanical* and *teleological* will be used as designations of the contrasted methods of natural science and metaphysics.

In addition to the distinction between the two reflective standpoints in consciousness, there is another equally fundamental distinction to be noted, that between the spontaneous and reflective consciousness. We have already become familiar with this distinction and recall it here on account of its bearings on the discussions on which we are about to enter. It may be asked here, why introduce the spontaneous consciousness into a discussion that is scientific and metaphysical? Does not science begin by turning its back on spontaneity and reconsidering all its conclusions from the outset? We answer that what science rejects primarily is the *method* of spontaneity. This leads, of course, to scepticism as to its results and the demand that nothing shall be admitted as true that has not first submitted to the stricter ordeal of scientific method. Recognizing this, there is yet an important sense in which the value of spontaneity survives the rejection of its method. It supplies a concrete world-view which persists and provides an important datum for both the scientist and the metaphysician. This concrete world-view is that of the plain man who has not been disturbed by science or metaphysics and who still

continues to take the things of sense as solid realities rather than as symbols of some deeper reality. We may call this the view of common sense, the common doctrine of the world, or the view of the spontaneous consciousness. No matter how we characterize it, it holds its place in consciousness as a persistent view-point and one that stands as a rival candidate for our belief, alongside of the concepts of natural science and metaphysics. Let us bear in mind, now, that it is only the *method* of the spontaneous consciousness which science and metaphysics reject primarily, and that their rejection springs directly from the fact that the spontaneous method is uncritical, that it has no clear consciousness of the presuppositions on which it rests and that it is too hasty in reaching conclusions. Admitting all this, it does not invalidate the whole view of the spontaneous consciousness. The plain man's view of the world may yet have something of value for us, and that is just the point we are about to raise here.

We shall ask, then, What value has the knowledge of the plain man for science and metaphysics? We know that the plain man takes his perceptions for realities and that his mistake, as we think it to be, has no disastrous practical consequences, since his world behaves itself in a way that is perfectly consistent with his assumption. Why do we say, then, that he is mistaken? Simply because he has overlooked a distinction that would completely transform the meaning of his world. A recognition of this distinction would lead him to regard his perceptions as symbols of deeper realities to which they stand related as effects. A very grave theoretic mistake we say, but one that scarcely touches the practical life inasmuch as the deeper causal reactions will be the same whether we regard our perceptions as things or as symbols of things. What survives as true and valid in the world-view of the plain man is its practical side. He supplies us with an example of a practical truth with which any theoretic doctrine we may reach as to the nature of things must not be incompatible. We

thus reach a criterion that when generalized becomes an important principle of negative guidance. It is open, we admit, to the theorist to disclaim all responsibility for the plain man and to develop his doctrines regardless of the plain man's interest. But this is a high-handed procedure inasmuch as the plain man's life-experience is a real feature of the world which cannot be eliminated. Besides, the difference between the plain man and the man who has been enlightened by natural science and metaphysics will be found to be mainly theoretical. The plain man and the philosopher differ in their interpretations of the world, whereas on the practical side there is a large segment which is common, and in this lies substantially the whole of the plain man's practical interest. This community of practical interest in the midst of theoretic difference would itself supply an important theme for further investigation, but we shall content ourselves here with the reference to the fact already brought to light in a former discussion, namely, that the practical interest arises directly out of the deeper experience of agency and, therefore, antedates the whole theoretic activity. We have seen how this deeper experience of agency in consciousness leads not only to the apprehension of deeper objective realities, but also to the development of symbols of these in bunches of perceptions. And the practical interest, not simply of the plain man but of the conscious agent as such, is so involved in the maintenance of the reality of the situation out of which the deeper experience develops, that any conception of the nature of things which proved itself finally incompatible with its reality would be incurring a responsibility such as the toughest theoretic constitution would be unable to bear. A theory of the world cannot afford to scorn the rock out of which it has been hewn, or to regard the fundamental situation which called it forth as anything else than real.

The criterion which the consciousness of the plain man supplies is thus a species of *postulate of practical reason*

and has the force which Kant ascribed to his practical postulates. We saw in treating the practical postulate as a form of certitude that its value for theory arises out of the fact that its denial would strike at the rationality of the world and consequently at the foundations of theoretic truth. Here we have developed from the practical interest of the plain man's consciousness a criterion which stands in this same fundamental relation to the theoretic interpretation of the world. For while it lays no claim to direct theoretic value and cannot be used directly or constitutively (to employ a Kantian term) in determining theoretic conclusions, yet it does possess value as a negative, restraining principle and, like a court of appeal, exercises the function of enjoining any theoretic construction incompatible with its own validity.

The dialectical situation in consciousness will then be represented by the two distinct but not fundamentally incompatible methods of natural science and metaphysics, which we have designated the mechanical and the teleological, together with the caveat of the plain man's consciousness restraining any doctrine that would involve the unreality of his practical experience. The process we are endeavoring to sketch in this chapter, and which we hope to fill out in greater detail in following chapters, is the whole movement of the reflective consciousness in its effort to put a theoretic construction on the world, and our aim is to show how reflection satisfies itself in the progressive stages of its movement and also how the resources of both the methods which it has at its service are exhausted in this effort, so that neither natural science nor metaphysics alone would be able to meet the demand. Moreover, the outlook of both natural science and metaphysics is objective. Allowing for all differences, the world that presents itself to the reflection of both natural science and metaphysics is the world of things on which the common consciousness puts its construction. What is the nature of this world of things? Answering this question, natural science trans-

lates the world of things into terms of the material, while metaphysics translates it into terms of the mental. And reflection finds that it has need of both interpretations in order to fill out the measure of theoretic truth.

From the standpoint of this objective outlook, however, the two ways of construing things do not rest on exactly the same plane. In its objective experience consciousness finds the world first symbolized in perception, and its first point of departure in its purely theoretic enterprise will be from the standpoint of perception. This commits it to the method of natural science and the world of materiality. The motive of the metaphysical interpretation lies deeper and is, at first, latent. It arises in connection with the activity of natural science; at first, to modify its world and, finally, to transform it. It is thus the same world of things about which natural science and metaphysics busy themselves, but in the order of procedure the material construction of natural science stands in the foreground, while the mental construction of metaphysics occupies the background. Moreover, it has already been shown that the construction of natural science is one of natural causation while that of metaphysics takes on the form of finality.

Reflection starts with the things of perception which the common consciousness takes for realities, but which reflection soon discovers to be symbols of reals which do not reveal their inner nature. It is not to be denied that the discovery that perceptions are symbols rather than things marks an epoch in the intellectual life and is often the cause of an eclipse of faith, but it must be gone through with in order that science may get on, and the eclipse of faith is likely to prove but temporary. The progress of knowledge is ordinarily accompanied by what may be called a transition from naïve to rational faith. But disregarding the faith issue our principal concern here is with the progress of knowledge in the world of reflection. The first epoch-making step is the resolution of the things of the plain man into phenomenal symbols

connected with hidden realities. This resolution of things supplies the plain man with no valid grounds for complaint provided it does not carry with it the unreality of his own practical experience. Now, reflection may at this point disrupt the connection of the symbol with the underlying real and may regard the former as the only real. It thus becomes purely phenomenalistic. Or it may deny the value of the phenomenal, reducing it to mere appearance, while on metaphysical grounds asserting a deeper reality, analogous to the Eleatic being. In this case it becomes purely transcendental. If, however, we take natural science as a reliable guide to the course reflection actually follows, it will be evident that both these extremes are avoidable and that the second epochal step will be the grounding of the phenomenal world in a deeper system of substances which are construed under the notion of materiality. Science first relates its phenomena to hidden reals. It then constructs a character for these reals under the notion of materiality. They are substances which persist and maintain themselves quantitatively undiminished through all changes and transformations and thus supply a stable ground-work to the world. The notion of material substances, which may be construed as atoms, forces, or ether-waves, and which ground the phenomenal without revealing their real nature in its symbols, marks the second revolutionary step of reflection. In the third place, the plain man ascribes a direct causality to the things of his world. When it grows suddenly cold and water turns into ice he does not hesitate to ascribe direct causal agency to the low temperature, and he is just as sure that when he wills to move his arm and it moves, his conscious volition is the direct agent in producing the effect. But the first step of science resulted in the breaking up of this simple world, and the separation of the plain man's things into symbols connected with underlying natures. When the question of causation arises the situation as conceived by natural science seems to supply a *crux* to reflection. The modern

doctrines of causation are marked by a common fault, they are all too certain that the plain man's theory is wrong. I mean wrong fundamentally. And as it is fundamentally a theory of *agency*, they set out by expelling the notion of agency. If there be any virtue in this discussion as far as it has gone, such conduct will have to be revised and we shall have to look elsewhere than to the expulsion of agency for the revolutionary work of science. If we take the case as it actually presents itself to natural science it would appear that a doctrine of causation might take several different forms. In the first place, if we regard the world of perception as the only real, then since it would be absurd to suppose agency on the part of mere symbols, we may become pure phenomenalists like Hume and translate the notion of cause into that of mere sequence in time. Anything may then be the cause of anything provided it has the fortune to uniformly precede it. Rejecting phenomenalism, we may become transcendentalists and regard real causation as a function of things in themselves and as having no correspondent in the world of perception. It would seem, however, that the real practice of natural science in reaching its results might supply some theoretic guidance in this vexed field. Science may treat its phenomena in two different ways, regarding them either as pure symbols, in which case they are connected with underlying realities; or as symbolized realities, in which case the real substance is conceived to be immanent in its manifestation and phenomenon bound to phenomenon by a real connection. In either case the link is natural causation. In the former, which is perhaps the most characteristic, the real substance, light, electricity, stands as the agent which produces the symbolizing phenomenon as its effect. In the latter case, which perhaps represents a more metaphysical view, the agent is conceived as maintaining itself in existence through changes of phenomena, so that a becomes the cause of b only through the unchanged nature x that is immanent in both. In such an instance the link is forged

by the common nature, which thus becomes the agent in relating the two otherwise distinct symbols. In either case the essential claims of agency are recognized. But in the more ordinary view of science in which the symbol is related to the substance as its effect, it is possible to take the relation of uniform sequence among the parts of the phenomena as the symbolic equivalent of the causal agency that underlies it. The calculus of uniform sequences thus becomes a reliable guide to the operation of underlying causes. But in no case would the mere calculus of uniform sequences among phenomena have any significance were it not kept in close relation to the presupposition of real agency underlying it and of which it is a symbol.

We thus reach the conception of the world which natural science substitutes for that of the plain man. It is the plain man's world greatly modified but preserved in one very essential feature. The plain man and natural science agree in regarding the world as essentially a world of agency, and it is this common faith in agency that natural science embodies in its principle of natural causation. If, now, we take natural causation as the central principle of that method of the reflective consciousness which we call natural science, it will be possible to characterize the whole activity of natural science as one whose aim is the investigation and interpretation of the whole world of phenomena under the principle of natural causation. The latter is the principle of physical as distinguished from mental agency. It is the principle of the mechanical as distinguished from the teleological.

We have seen, moreover, that the method of metaphysics involves a still further transformation of the plain man's world. The plain man regards his perceptions as real things. Metaphysics goes with natural science in breaking up this simplicity, and it, too, looks at the world of perceptions as a symbol of deeper realities. But what the perceptual world symbolizes for metaphysics is a deeper

arena where the realizing of ideas and the fulfilling of purposes is going forward. What does the great panorama of perception symbolize to metaphysics but the operation of agencies, divine or otherwise? And the connection of these with an ideal *prius* in which they are conceived and intended, translates them into processes of reality. The *symbol* in metaphysics stands, therefore, for *the fulfilling of an ideally conceived purpose* and its meaning ceases to be physical and becomes mental. And just as in natural science the central principle is natural causation, so here the principle of metaphysical construction, the norm which determines the form of its world-interpretation, is finality, or, as we might say, teleological causation. In all this transformation, however, which has completely broken up the simplicity of the plain man's world, there is one central article of his creed that has been preserved. That is his faith in agency as the central fact of the world. The metaphysical transformation, like that of natural science, ends by confirming this central doctrine. The plain man's world is a world of agency. Natural science translates this agency into terms of natural causation, while metaphysics construes it in terms of prevision and finality.

The movement of the reflective consciousness we have called a *dialectic,* but this term requires some explanation. It means the interplay of two forces but not on the same plane. There is a sense, we admit, in which the methods of natural science and metaphysics might stand as rival and incompatible modes of interpreting the same world. But this would not represent a true dialectic. It is only when the fulfilling of one method leads on by way of a kind of reaction to the application of the other, that real dialectic arises. The dialectical procedure rests on *progressive insight* rather than accident or blind antagonism. The normal order is first the application of the method of natural science, which involves the translation of the whole world into terms of natural causation. Let us suppose

that the method has completed itself and that every phenomenon has been mechanically connected with its ground. Is there anything further to be said? The very nature of the physical type of agency to which everything has been reduced reveals the fitness of the world-representation for a final theory of the meaning of things. Phenomena are connected as effects with underlying causes. But these causes, while they supply efficiency for the production of things, do not provide the reasons for their existence. Physical causation does not supply the *rationale* of things, and, so far as it is concerned, their non-existence, or the existence of their opposites, could make no difference to the world. At a critical point natural science gives the world over to blind chance or, at least, to a blind energy that can only chance it in the production of results. Now, it is at this point where the world is threatened with irrational overthrow that the type of agency which we call mental begins to assert itself. Mental agency differs from physical, as we have seen, in being previsive and in translating its causal term into ideally informed purpose. Thus arises the method of metaphysics. Here the dialectic works by means of the insight that the only thing which can save the world from irrational overthrow is the introduction of prevision into the efficient agencies of things. If mere blind will, or push, is not sufficient, the qualifying of it with insight translates it into idea or relates it to an idea in which its efficiency becomes the fulfillment of what is prevised and intended. The metaphysical method is thus launched and fulfills its mission in the construction of the world in terms of rational meaning, that is, in terms of finality.

How, then, do we find our way back again to the world of natural science? This is a pertinent question inasmuch as it is not given to any one to live in a pure metaphysical world. But the answer is not so far to seek. It is the plain man in each of us with his practical interests that brings us back. We have referred the conduct of

things to prevision in order to qualify them with meaning, but we are not long in discovering that this prevision is not our own and that it makes no direct revelation of its intentions to us. For practical purposes, then, we have to regard the intentions of the world as hidden, and its movements as phenomena which have to be translated into terms of natural causation, that is, of non-previsive agency. This may seem like a lame conclusion, but it is good sense and it fits into the dialectic by instituting another moment of natural science which in turn leads on to the moment of metaphysical interpretation. The result of the dialectic is a progressive application of the method and principle of natural science to successive groups of world phenomena giving rise to successive stages of natural science, while in connection with this there develops a series of metaphysical insights leading to a progressive metaphysical interpretation.

Let us then attempt to outline briefly the stages of the dialectic in its actual application and in connection with these the points where the most important transitions and transformations arise. If we take the world of experience as a whole it will be obvious that the point of major transformation, as we shall call it, is the one where consciousness becomes overt as an agent in giving rise to effects. Below this point the world will be dominantly or wholly physical and the reign of natural causation will be unbroken. The world as qualified by consciousness will be one in which we shall have to deal with a correlation of the mental and physical orders and in which natural causation, though still the supreme principle of science, will find it necessary to submit to many transformations in the form of its application. To the world below consciousness as well as to the world qualified and transformed by consciousness, the dialectical movement of reflection will apply, (1) in the movement of natural science in its attempt to construe the activities of things under the principle of natural causation, (2) in that of metaphysics whose effort

will be to attain a rational interpretation of the inner and (to science) hidden nature of things. The stages which will arise in the course of this synthetic effort may be indicated as follows. Below the point where consciousness becomes an overt factor in the world, there are at least two grades of phenomena which are distinguished as inorganic and organic. The inorganic is the sphere of the unqualified operation of purely physical forces and agencies. Here we have the reign of natural causation in its utmost simplicity, inasmuch as it has but one order and one type of activity to deal with, the type called motion in space and time. The representative science here is physics, to whose processes mathematics becomes instrumental. At the limit of the field of the inorganic the organism appears and transforms the physical world. We are dealing here only with the organic below consciousness, that is, with life before it takes on the overt form of conscious movement. The appearance of the organism, whatever be our conception of the nature of the life it embodies, introduces complexity into the physical world where before was relative simplicity. The organism arises in the midst of the more general physical forces and presents for the first time the appearance of an *imperium in imperio*. There is, in fact, a double series, the outer physical and the inner, constituting the life-movement of the organism, and the problem of their relation arises and requires settlement before science can get on.

Below the point of consciousness, then, two distinguishable forms of world-activity arise, the inorganic whose organ is physics and the organic below consciousness whose organ is biology, or rather biological physics. And these represent two stages in the application of the dialectic of reflection. Natural science, embodying itself in the form of the two disciplines, physics and biological physics, seeks to construe the movements of inorganic and organic nature in terms of natural causation. The metaphysical problem here will arise in connection with the most ultimate con-

ceptions of physics and biology, and it will show how the metaphysical insight is progressive, leading to richer results as we pass from the field of physics to that of organisms.

The appearance of *consciousness* marks a revolution in the character of the world. The problem of the dual series below consciousness is solved by subordinating the organism to its environment and translating its movements into terms of response and correspondence. We shall see, however, that the corresponding problem after the world has become qualified by consciousness is not so simple and very stubbornly refuses to yield to treatment. The truth is, consciousness, when it becomes overt and explicit, brings into the world its dual standpoints out of which develop the movements of natural science and metaphysics, and the duality of series arises in connection with each and demands both a scientific and a metaphysical explanation. This will have to be remembered at the proper time and the two aspects of the problem carefully distinguished. Now, the science which deals with the conscious world is psychology, and the problem of the double series on its scientific side will be a problem for the psychologist. But whatever conclusion psychology may reach will, in the nature of the case, not be final. It will be a solution that will take the fact of the duality as an ultimate and will seek to construe the connection of the two series, the mental and the physical. Moreover, the principle of the solution will be that of natural causation, from which it does not necessarily follow that the connection of the mental and physical will be interpreted as a causal relation, but rather that the interpretation reached, whatever form it may take, must satisfy the requirements of a causal explanation. The metaphysical problem will be that of the duality itself, —Is this final, and if not what is its final explanation and what reality does it symbolize?

In the world qualified by consciousness beyond the limit of psychology proper, to which falls the whole business of

dealing with the individual consciousness in its complex relations, there lies the field of social movements and phenomena. This includes a psychological division dealing with the individual as a social unit, and a social division proper, dealing with groups of social units. To this whole field, adopting the terminology of Herbert Spencer, let us apply the phrase *super-organic*. The world of social activities will thus stand related to the world of living organisms as super-organic, not in the sense that the living organism is transcended. This is manifestly false. The social is super-organic (1) in the sense that its movements are *ab initio*, phenomena of consciousness, (2) by virtue of the fact that they are *inter-organic* in their bases, involving the interaction of groups of living and conscious beings as their organ proper. Now the natural science which deals with this type of phenomena is rightly called sociology, its aim being to investigate the natural causes and conditions of social movements and in the light of these to determine their most fundamental laws. The metaphysical inquiry will arise here out of the question whether the fundamental requirements of the individual nature of man are fully met in the social life and organism. This will lead to the treatment of some ultra-social aspects of the individual nature, and the problem will arise whether there are not ultra-social demands arising out of the individual's consciousness which can be realized only in a world that is not merely temporal but *eternal*.

We are thus finally ushered into the world of *religion*, The phenomena of the religious consciousness in their universal historical, as well as in their individual aspects, present a well-marked phase of the world of consciousness. As such they supply a legitimate object of investigation to both natural science and metaphysics. It is to be remembered here as elsewhere that we cannot hold natural science responsible for a complete theory of religion. What science may legitimately aim at is (1) from a comparative study of religions to determine their common essential characters

and, (2) from a study of their history to determine the natural causes and conditions of their rise and development. Having accomplished this, natural science will find itself practically helpless in view of most of the great problems regarding the nature of the world and the destiny of man which arise out of the religious consciousness. The reason for this is not far to seek. The fundamental insight of religion relates man consciously to some transcendent reality. This insight is like a great spring or fountain out of which wells the consciousness of the eternal and those problems of freedom, the soul's nature and destiny, and God, which in their *ensemble* make up the staple of the spiritual life and interest of man. For the solution of these problems the observational standpoint of natural science is not well adapted and its principle of natural causation seems to become a dumb oracle. The spiritual problems are all problems arising out of man's fundamental agency and they have meaning only in connection with the struggle he is making to work out his destiny. They are all essentially individual in their character and as a group they embody the interest of that aspect of the individual life which transcends the social and pushes out into the eternal. The burden of their solution will be found, therefore, to rest mainly on the metaphysical method. For while in the world of pure physics metaphysics must perforce play a subordinate rôle, in the world of the higher spiritual issues of consciousness, on the contrary, the word of counsel belongs to metaphysics while the oracle of science becomes largely silent.

CHAPTER II.

PHYSICAL ACTIVITIES.

Two problems of fundamental importance arise in connection with the world of physical activities, the one epistemological and somewhat formal in its character, the other pertaining to the matter of science and metaphysics. The first question is that of the method by which consciousness defines the world objectively and reduces it to intelligible forms. We have already shown in the first part of this treatise that objectivity is given immediately in present experience, so that our search for the object takes the form of a process of definition of objective material. Now in my *Foundations of Knowledge,* under the designation of *Categories,* I have endeavored to show with some detail how the various forms of objective existence arise in consciousness. The substance of the doctrine developed there I shall try to state here in a few sentences. The knowing consciousness reaches its primary apprehension of the object through the medium of certain fundamental terms which we, following Kant, have named categories. These categories are two-sided and mediating: as species of consciousness they are simply primary forms of conscious function; whereas, objectively, they are defining forms of objective existence. The category is thus at the same time a mode of conscious activity and also a defining principle of objective existence. It is aroused into activity by certain primary experiences, the forms of space and time arising in connection with

those experiences which call forth the first acts of attention in perception, while the dynamic forms by which the world is reduced to a system of substantial existences and causal agencies arise in connection with those primary experiences of a deeper kind which are connected with the exercise of our conscious agency. If, then, we put the epistemological question, how we came to have an objective world defined in the forms in which it presents itself to us, the only answer we can expect to find for such a question is one that points us to the fact. Consciousness itself is the only door through which we can apprehend anything and consciousness has certain primary ways of reacting on the world and defining it objectively, which, taken together, constitute the most fundamental forms of knowing as well as the most primary aspects of objective existence.

Assuming now that the epistemological question has been answered when the method of consciousness in realizing the world has been pointed out, and that the question *why* is futile, let us turn to the problem of more direct scientific and metaphysical interest. We divide this problem into two questions, (1) What is the fundamental conception of the world that underlies its physical investigation, and (2) What are the essential elements in physical method? For the first question we have already found a partial answer. The physical conception of the world is one that represents it under the fundamental notion of phenomena and underlying grounds or forces. We have already seen that the notion of *grounds* in physics is that of underlying and permanent substances, and that these are translatable into the material concepts of physics; into atoms, forces or ethers. Physical substances are the substantial agents of all the changes or phenomena with which the science deals. These substances are represented as causally related to the movements of the physical world which are conceived to be, not real existences in themselves, but symbols of real existences whose inner nature they do not reveal. Now we have seen that the causal relation,

which we call the link between the underlying substances and the phenomena which symbolize them, may be represented in two different ways. The phenomenon may be taken as an abstract symbol and treated as the effect of causal forces or agents which underlie it; or it may be taken concretely as the symbolic effect of an agent or nature which is represented as immanent in the symbolic changes and as constituting their persistent and self-maintaining ground. Thus, to recall the illustration already used, symbol a is related to symbol b as its cause because some hidden nature x persists as the common substance of both. It is clear, however, that whichever one of these alternative notions of linkage we may choose to adopt, there will be involved the presumption of a real dependence of the phenomenon on the substance which it represents.

This doctrine, which is simply a restatement of conclusions already reached in earlier discussions, we now propose to carry further into the field of the working concepts of physics. If we ask the modern physical investigator what the most fundamental concepts of his science are, he will very promptly reply, *matter* and *motion*. If we ask a second question, which of these concepts is of most immediate importance to the science, he will answer, *motion*. The whole of physics is a calculus of motions. And he will point to the kinetic theory as an illustration of the tendency to reduce physics practically to a science of motion. Now the aim here is not primarily critical but constructive, and what we have in mind to do is to show how this tendency is related to what we have defined as the notion which underlies physics and determines the primary character of the world with which it deals. A little reflection will show that the concepts of *matter* and *motion* are very closely related to the notions of *ground* and *phenomena*. For *motion* is clearly the phenomenal term, while *matter* is a name for that whose nature is largely hidden. But neither term is quite identical with its correspondent. The phenomenon of physics is a motion, and a motion is a symbol

of a hidden real, but a motion is a phenomenon stamped with a definable nature. It is not a mere effect or change, but it is a change in space and time, a change that has qualified in an order of spatial positions as well as in a scale of points of sequence in the series of time. This double qualification invests it with definable character and makes it susceptible to mathematical calculation. And it is right here in the quantitatively definable quality of its phenomena that physics becomes an exact science and opens up a field for strict mathematical determination. Just as little can the physicist's matter be identified with the notion of indeterminate ground or substance. The character of the phenomena with which physics deals is such as to necessitate certain presumptions regarding the nature of the substances which underlie them, and these presuppositions will arise from two different sources, (1) qualities which the phenomena do not possess, but which must be supposed to exist somewhere in order that science may be possible, (2) qualities which the phenomena do possess and which are prescriptive as to the notions we must form regarding their grounds. Now regarding the first set of qualities, it is clear that motions do not carry with them the guarantee of their own stability nor do they constitute their own medium. Physics presupposes a medium of motion in which motion may be initiated and conserved, and it presupposes the stability of that medium. Consequently matter, which is a name for the ground of motion, must supply these demands, and it is forthwith defined as *permanent, indestructible,* and as constituting a *frictionless medium* for the propagation of motion. If matter were to be conceived as interfering with motion in any way or as retarding it, like the traditional matter of Plato which stubbornly resisted organization, the certitude of science would be completely destroyed. But in the second place, phenomena possess certain qualities which are prescriptive as to their grounds. In their fundamental character as effects of underlying causes they are determined as mechanically

rather than teleologically related to their grounds. But in their character as motions they are determined as spatial phenomena, and this must be taken account of in the effort to represent the mode of activity which they embody. If we are to represent the activities of things as taking the form of motions in space, what implication does this involve? A motion in space is always from *a* to *b* and on to *c*, and so on to the end of the chapter. Now *a* and *b* as points in space are external to one another, so that if anything at *a* is to effect *b* it must do it externally and from its own position. Let us suppose *a* and *b* to be points in space which are filled with motion, that is, as moving points. If, now, *a* is to affect *b*, or the reverse, it must be by *external impact*. The movements in *a* and *b* must collide or they must come together at various angles of incidence, and the effect must be either rebound, in which motions are exchanged, or composition, in which the resulting movement will be compounded of the separate motions of *a* and *b*. The representation given here is that of a purely physical phenomenon where the quantity of the movements may be determined. And the implications which are most clear and obvious are that these motions are the natural effects of existents which are *many rather than one*, and that they are in a state of *causal interaction*. If the phenomena were chemical where certain changes of quality arise in connection with the movements, these implications would be the same. Neither physics nor chemistry can get along with one substance. They may find their ultimate terms reducible to one species, but of this species there must be a multitude rather than one. The character of physical movements requires this. It also requires that this multitude should be in dynamic interaction in order that the existence of the movements may be intelligible.

Returning, then, to the consideration of matter, we have found that this term in physics represents the notion of substance qualified by a number of properties which physics ascribes to it. In the first place this matter is represented

as stable and as the causal ground of motion and in this sense simply as the bearer of motor attributes. But these motor attributes have been further defined in view of the nature of physical motion. That of stable ground is translated into the notion of a stable medium of motion, while the causal function itself is refined into the notion of an absolutely frictionless ether in which motions once originated will find nothing to retard or diminish them, so that they are theoretically assured of perpetual existence. This continuity of motion on its negative side is *inertia,* the quality by which any physical agent when at rest or in motion, continues in that condition until put into a different state by the action of some force external to it. In the notion of inertia, then, we have the developed concept of *mechanical* as distinguished from and excluding *teleological* agency. Matter as inert represents pure mechanical activity and the complete absence of any form of movement that is self-initiating. If, now, we turn to the notion of matter which is embodied in the conception of a plurality of substances in causal interaction, it will be found that this gives us substantially the modern dynamic conception which came in with Boscovitch and Leibnitz, a conception which reduces material substance to a plurality of dynamically interacting forces, while the movements of the world are represented as their symbolic effects. On the other hand, the theory which reduces matter, or tends to reduce it, simply to an ideally frictionless and stable medium for motion, may be called static. As a matter of fact we find physical conceptions oscillating between the static and the dynamic poles, and it is perhaps impossible to predict how the final state of stable equilibrium will be reached.

We are concerned here not so much with the details as with the foundations of the physicist's creed. And the points we wish to emphasize are: (1) that the whole physical doctrine of matter and motion which has been worked out by the modern physicists with such infinite pains

stands as the qualified construction which physical reflection is led to put on the more fundamental notions of *ground and phenomena* on which its whole doctrine of the world is found to rest. Neither term of this duality is left unmodified. We have seen that in motion the phenomena take on a definite character and become susceptible of exact measurement. In matter, likewise, the concept of ground is qualified by the ascription to it of qualities which render it an ideal bearer of the *kind* of motion with which physics concerns itself. Now it cannot be denied that in yielding to the necessity of qualification, physics has in a sense phenomenalized its ground and in a sense proved untrue to its profession of ignorance of the nature of this ground. A certain consciousness of this is betrayed in the claim made in some quarters that both terms of physics are purely phenomenal and that science has nothing to do with the notion of ground. But in order to divest itself of all complications with that which is deeper than the phenomenal it would be necessary to resort to more radical measures than have yet been proposed.

We are thus led to the second observation, which is that by no possibility can physical science dispense with the notion of physical agency embodied in the principle of natural causation, without losing most of its value as a theory of the world. The temptation in physics is not now, as it once was, to substitute final for efficient causes. It is rather to dismiss altogether the notion of causal agency. The idea that anything should really be able to bring about a change in anything else seems most abhorrent. Of course the temptation to this exclusion is not so strong with the advocates of the dynamic theory who seem committed to the notion of efficiency in the form of dynamic interaction. But it will have its full force with the advocate of the static view. Here the scientific imagination seems to exhaust itself in the effort to conceive a medium so unstable that an infinitely small transcendental frog would be capable of initiating in it an infinitely large movement.

We admit the validity of this effort, but the fact remains that the frog, though indeed "such a little one," is yet an agent and performs a causal function. In order to really succeed in expelling the notion of natural causation it would be necessary to imagine a medium so sensitive that it could initiate movements by its own impulse.[1] In short, the alternative to natural causation, if we exclude final cause, is *self-initiation* and this would transport us immediately into the very heart of metaphysics. The concept of agency embodied in the principle of natural causation is so fundamental that without its guidance the fear would be well grounded that physical reflection would be left on a sea of speculation, as helpless as a craft that has neither compass nor rudder. In truth, the over-refinement of physical speculation seems to be tending in this very direction. The denial of natural causation seems to carry with it the feeling that physics is absolved from all responsibility to the nature of things as realities and that it may abstract the purely phenomenal terms of its calculation from any living commerce with their grounds. Its motions thus become abstract symbols like the terms of mathematics, and it in fact seeks to assert for itself all the prerogatives of a mathematic. But it should bear in mind that the foundations of mathematics cannot be usurped and that its own foundations commit it to a conception of the world in which its phenomena stand as symbolic effects of underlying causes; that to prove untrue to these foundations would involve the surrender of the claim that physical science can be taken as in any sense a construction of reality.

The whole method of physics is one that involves three moments, inductive observation, causal explanation, and mathematical determination. The first moment embraces the whole first-hand relation to facts in which phenomena are selected and generalized into what Mill calls empirical

[1] The new discoveries in Physics mark an approximation to this point, but to actually cross the line would require a qualitative change of nature.

laws. Mill has shown that this process of generalization is one in which observation is transcended, inasmuch as it involves an inference of the universal from a limited sphere of observation. And yet it is absolutely essential to the existence of science. This dilemma led Mill to see that a second step must needs be taken which he called the grounding of induction. Superficially, Mill seems to make his appeal here to the uncritical judgments of spontaneous experience, so that it would appear to call in the plain man to settle an issue for science. But Mill does not in truth proceed so uncritically. His real solution of the question of grounding is found in his doctrine of universal causation. The generalizations of observation do not rest on the loose uniformities of ordinary experience, but rather on a specific kind of uniformity; namely, the uniform presence in the world of a cause or determining antecedent wherever any change occurs. True, Mill does not give any coherent account of the universality of cause itself, but he is clear in the recognition that cause is the principle which rationalizes the foundations of science. An empirical result only becomes a real law when it is seen to express a uniformity of causation.

Now it is possible thus to translate our inductive observations into laws which express the causal determination of nature, and up to this point Mill is a reliable guide. But here his insight very strangely breaks down and his doctrine of method remains a fragment. What Mill failed to see is what may be called the third important step in physical method, the step which we have called mathematical determination. Let us suppose that Newton, in the process of reflection that led him to the discovery and statement of the law of gravitation, had simply followed Mill's conception of method to its end, what would have been the result? Newton had before his mind those generalizations, called laws of motion, which had been worked out before his time. These laws were empirical and descriptive rather than explanatory. Moreover, they were

fragmentary and pointed to some common principle. Newton was in quest of this universal principle and he found the suggestion of it in such a simple phenomenon as objects falling to the ground when unsupported. The principle itself was a universalization of what Newton conceived to be the cause of this, namely, the power which matter has of drawing other matter toward it. The principle of gravitation or attraction thus expresses a real law of natural causation. Now this is as far as Mill's method would lead the investigation. Aside from certain processes of testing and verification, the Mill-method leaves its results in this vague, undetermined form. There is, however, a further question to which all this leads up: namely, What is the *modus* of this law; can the *how* of its operation be stated? This is the question for mathematical determination. We have seen in our study of motion that the species of movement with which physics is concerned is one that is susceptible of quantitative definition. By applying the mathematical calculus to the quantitative aspects of motion, the law that embodies a causal determination of its uniformity may be further defined so as to express the exact mode in which the uniformity is realized. Newton fulfills the last requirement of method in quantifying his law so that it not only asserts the presence everywhere of causal force in matter to attract other matter, but informs us also that the operation of this force is everywhere measurable, directly, in terms of mass, and inversely, in terms of the square of the distance.

The three steps make up the whole of physical method. But we have presented in the practice of physical investigation the phenomenon of elements of method falling into virtual disuse. I do not now refer to those branches of science in which mathematical determination is largely impracticable. In physics itself a tendency is found toward alternative conceptions of method. Let us call the exponents of these tendencies respectively *formalists* and

dynamists. The formalistic tendency is one that throws causal explanation into the background or casts it out altogether, and treats the processes of inductive observation and mathematical determination as alone vital. It is clear that in this conception of method we have the view of those who hold that science has nothing to do with the notion of cause, substance or interaction; that its whole business is with the motions of things in space and time, and that it has performed its whole *Pflicht* when it has discovered and calculated the laws of motion; meaning by laws, observed uniformities. In this view the dynamic constitution of the world is not denied: it is simply ignored. Standing out in clear opposition to the tendency of the formalists, is that of the dynamists, in whose conception of method the notion of effective agency stands central. The dynamists deny neither inductive observation nor mathematical determination. But the supreme accent is placed on that element in method which we have called causal explanation. We do not mean to say that cause is conceived here in any crude sense. Quite the reverse. The notion as it is conceived is translatable into one of dynamic activity, a kind of energizing that symbolizes itself in changes which we call motions. These motions are thus the symbolized effects or manifestations of an efficiency which underlies them; or which from another point of view, is immanent in them as their real nature. The physicist of this type regards his motions as symbols of real substances and as effects of forces that themselves do not appear. Thus electrical phenomena are regarded as the movements of a real agent called electricity which, nevertheless, does not reveal its inner nature so that we may say what electricity is in itself. This dynamic conception determines the whole method, because in its light the investigator cannot divorce his process from reality. His investigation is either revealing to him the truth about things or it is of no value. To him the phenomena he is

gathering and generalizing by induction are symbols of the operation of dynamic agencies and his mathematical determination of the *modus* of this operation is one that keeps him close to the pulse of the real world.

We hold no brief here for the trial of the case between these two rival conceptions of physical method, but having tried to indicate the fundamental concepts and lines of cleavage in physical procedure, we are now ready to consider the connection of the physical investigation with metaphysics and the mode in which the metaphysical implications of science appeal to our interest. We have said that the notion of natural causation as a form of agency stands central in natural science. But here in physics we have come upon a tendency to eliminate the notion of cause from scientific procedure. This calls for some further consideration. Taking the two opposing tendencies as expressing opposite attitudes toward natural causation, the case may be put as follows. Physical science either recognizes causation as central or it does not. If it does not, its tendency then is to minimize the notion and practically to eliminate it. The elimination of cause tends, we have seen, to a formal conception of the aim of physics which leads to the abstraction of its method and to its divorce from the real world. The real world is a sphere of agency, but formal physics casts the notion of agency out of doors. On the other hand, if physics recognizes causation as central it is because it embodies the notion of agency on which physics as a dynamic science is founded. The essentials of that notion appear in the fact that it separates the moment of efficiency which connects the agent with its symbol in the world of effects, from the moments of *prevision* and *finality*. Whatever else physics may or may not assume regarding its phenomena, it may not assume that they are products of intention and foresight. It must treat them under the notion of an agency that is unqualified by any elements of finality. The results in

physics are to be connected with forces whose operations are external and calculable rather than with agencies which are internal and incalculable.

Let us consider how the metaphysical demand arises in connection with both of these physical conceptions. Taking that of the formalists, who abstract largely from the world of reality, it is a characteristic of this concept of the science that it drops one after another, in detail, all questions pertaining to the nature of reality. It becomes more and more bound up in the conception of a *world-automaton* in which every movement is explained when it has been exactly stated in terms of quantity; that is, when it has been accurately measured, and in which all apparent agents are mere puppets and by-spectators of the show. In thus conceiving its world, physics does not deny the real world of agency, but simply thrusts it beyond its own pale. It is there, however, and if not science, then some other discipline must take it up and determine what can be known about it. The formal conception of physics thus only increases the demand for metaphysics and the responsibility which rests on it. It has simply thrown out agency as scientifically unmanageable and the demand becomes urgent that metaphysics should develop a doctrine of agency in general and one that will ground an intelligent distinction between its physical and mental forms. For on this distinction will rest a rational theory of the real world. The formal physicist cannot deny metaphysics without thereby regarding his denial of agency as absolute. But this would be impossible. The physicist may become completely agnostic so that his insight does not give him any hint of reality and he may see fit to confine knowledge to the boundaries of his own world-automaton, but he will not deny the existence of a real world with its problems, outside of the circle to which he has limited himself, nor the right of some discipline to make this world and its problems an object of investigation. Moreover, the formal physicist does not deny the distinction between the mechanical and

the teleological, although he confines himself to the mechanical. His own consciousness reveals to him a kind of activity that is previsive and end-seeking, and it cannot help striking him, as it strikes all reflecting minds, that this type of activity may have place outside the narrow confines of his own consciousness. His method excludes this type strictly from physical data, but it does not exclude it from the world of reality. If the teleological form of activity which we realize in consciousness supplies a world-problem, it is clear, then, that the investigation of it will be ultra-physical. From the standpoint of formalistic physics, then, it cannot be denied that a theory of the world, in order to be more than fragmentary, to be in any sense complete, will involve a synthesis of physics with metaphysics.

The concept of physics apparently most inimical to metaphysics is thus found to be most friendly. From its point of view metaphysics cannot be denied; it can only be wet-blanketed with the plea of agnosticism which involves a problem not here at issue. Naturally the patron of metaphysics will anticipate a more friendly reception in the camp of the dynamic physicists. For here the claims of agency are recognized and made central. Dynamic physics does not doubt that the world is a system of agencies, but the line of cleavage arises within the field of agency between the two distinct types with which we are already familiar. Dynamic physics finds itself strictly limited to the type of agency embodied in natural causation which is non-previsive and mechanical. But it is familiar with the opposite type which is previsive and end-seeking and which is central in the deeper activities of consciousness. The question must then inevitably arise whether this type of agency, which seems to be so fundamental to the conscious individual, may not have a significance also for the world. This suggestion is further strengthened by the reflection that mechanical agency is not finally explanatory. It does not give the meaning of

anything for the system to which it belongs, whereas in the teleological type we have an explanation adapted to express meaning. Stimulated by this consideration, which also has significance for the formalist, the dynamic physicist recognizes the reality and importance of the issue. It is, however, plainly ultra-physical, and must be taken up by an investigation whose methods and limits will be determined by other concepts than those of physics.

We are thus led to a second problem, that of the form in which the metaphysical investigation so plainly demanded shall arise. Physical science in both its forms involves, as we have seen, the implication of a real world whose nature is hidden from view. The formalist finds himself farther away from this nature than does the dynamist, but he recognizes it and the same ultra-physical issues face both him and the dynamist. The suggestion of a different type of agency in the world from the mechanical, to which physics is committed, arises in view of a kind of activity of which every conscious being is aware. But the physical investigator does not find himself in possession of a set of conceptions which enable him to deal with such a problem. He must, therefore, give up its solution. But how should metaphysics be in any better case? The claims of metaphysics are very widely challenged and mainly on the ground that its terms are not real, but pseudo-conceptions. But that its conceptions are real, and not pseudo, will have the presumption in its favor if we consider the source of their origin. We have seen that physics recognizes a form of agency in consciousness different from its own. This form is found, on investigation, to be central in consciousness and to be related to a field of objective phenomena in a way that has essential analogies with the mode in which phenomena are conceived to be connected with their grounds in the physical world. Thus in the physical world the phenomenon is referred as an effect to the activity of a hidden cause which is necessary to account for its existence. In like manner, when in pursuit

of the idea of an instrument to be used in some investigation the physicist puts forth certain conscious activities the result of which is the appearance among phenomena of a new tool, he is conscious of having performed a function analogous to that which he locates in the heart of his world. But he is also conscious of a great difference. From the physical situation he must eliminate the *idea* which stimulated his activities and supplied them the model toward which they were to work. He must also eliminate all elements of *conscious selection, guidance* or *purpose.* The operation of his agent must be idea-less, blind and fatalistic, making straight and unerringly for a goal that is not in any sense its aim. A comparison of these two types of agency will inevitably suggest the world-problem, the genesis of which we have traced above. And in addition it will also supply the norms of those conceptions which physics lacks but which metaphysics needs, in order to enter on an intelligent investigation of that problem.

What, then, are the conceptions which have their spring in the revelations of conscious agency and supply the instrument of metaphysical investigation? In the first place the ground-discovery here is the fact that the central agency of consciousness takes on the form of *selfhood* and thus becomes vitally related to self-consciousness. What we learn is that conscious agency is self-agency and we find the self-agent relating itself in the idea, which is simply a conceived intuition of a creation not yet in existence, to the purposive activity which results in its fulfillment, that is, in its taking its place in a system of reality. Or, if we take a step that is perhaps necessary and close up the gap between the self and the idea, so that the self becomes identical with the present consciousness qualified by the idea, we shall have a situation describable as follows. Our consciousness, having conceived the terms of some new creation which is yet lacking in objective existence, moves on toward it in the volitional activity that is involved in its selection and realization. Here is a form of

agency, then, which contains in germ all of the most characteristic concepts of metaphysics. In the first place we have the notion of the self as the form of conscious agency, while in connection with it there arise a number of concepts of form. The self qualified by the ideal creation supplies the type of self-activity as distinguished from activity that is mechanically determined. The volitional outgo supplies the type of selection and purpose as distinguished from the fatalism of physical agency, while the process of realization gives the type of finality, that is, of the end conceived in such a way as to become the guide of the processes of its own instatement. When the physicist thus discovers a type of agency so different in its form and method of attaining results from the agency he deals with in the physical world, and realizes that the concepts he is working under leave no place in his world for the introduction of this new type, it will naturally occur to him to question whether his physical conceptions are to be taken as completely exhaustive of the nature of reality. And this question will derive additional force from the fact which will not long escape his attention, namely, that the excluded agency is precisely the most central and fundamental form of consciousness; that it supplies the underlying motives of cognition, and includes practically all the movements of his own life-activity.

It is clear, then, that the type of agency on which metaphysics founds its explanation of the world is not fanciful or foreign to experience, but that it is the very type exemplified by conscious experience itself. The claim of metaphysics is, in truth, that consciousness shall be permitted to identify the fundamental agency in the world with that which is most fundamental in itself. The world of metaphysics is thus the world of consciousness.

Now, we shall close this chapter with the consideration of three topics, (1) the necessity, (2) the *modus,* and (3) the limit of metaphysical interpretation in the sphere of physics. The necessity for the metaphysical investigation

arises directly out of the nature of the physical conceptions themselves. These, as we have seen, are of such a character that they can recognize no other mode of activity in the world than the mechanical. To physics natural causation must be absolutely universal. If there be forms of agency which will not fit into its mold, these are strictly excluded. But we have seen not only that other forms are conceivable, but that they are also actual. Precisely the most fundamental pulsation of the physicist's life is one that beats to a different measure. The form of an agency that is self-determining through the idea of its own preconceived end, is a present intuition in every man's consciousness. What is the relation of this form of agency to the world in general; and, in physics especially, what is its relation to the physical world and to its processes? These questions cannot be kept down, but they might be brushed aside as mere idle exhibitions of mental worry were it not for the fact that they find a kind of aid and comfort in the very camp of the enemy. The concepts of physics are such as to exclude certain qualities from the constitution of the world. The form of agency in physics is natural causation, but this is supposed to act mechanically and without intention or end-sight. The phenomena of the world are regarded as symbols of certain substances or forces which do not appear, but these forces which are the world-agents in producing effects are supposed to lack all that kind of intelligence which a man possesses when he knows what he is about. I mean the intelligence that shapes itself into idea and purpose and thus gives significance to movements which would otherwise be meaningless. What physical conceptions exclude from the world are (1) intelligence, that synthesis of ideal prevision and purpose which translates a blind force into a conscious self, and (2) finality, that selective anticipation of a thing to be realized which translates meaningless movements into actions that are significant, inasmuch as they have a place in an intelligent scheme. In view of this the question of *primacy* is inevita-

ble. Can the mechanical conceptions of physics be taken as completely exhaustive of the meaning of the world, or must the world also be qualified with intelligence and finality? There seems to be only one rational answer to this question. We cannot be satisfied to rest in a theory of the world that excludes intelligence and finality from its heart. Because, a theory of things which claims to be finally satisfactory must be one that contains an intelligible reason for their existence in the system to which they belong. We mean by an intelligible reason one that will not leave them, in the last analysis, to mere accident or blind fate. Now it seems so clear as to be inevitable, that nothing but intelligence can supply such a reason. For while it may be possible as a proximate reason for the existence of things in the system to which they belong, to point to some fixity of nature which makes it certain the forces will act just in this uniform way, yet this in the end only shifts the question to the fixity itself about which the same difficulty arises. And this might go on *ad infinitum* without reaching any final term. The difference between all this and a reason which will be satisfactory is a difference of quality. It is not a reason which will forestall the possibility of further questioning, but one rather, able to give an intelligible account of existence. If my existence here and now is to be rendered intelligible it will not be sufficient to regard me as something that has been thrown up by the action of blindly working and fatalistic agencies, for then I have no significance in the world and I might have been altogether missed and something wholly different might have been thrown up instead, without any meaning having been thereby thwarted or turned aside. I would in that case belong to a world in which accident is supreme and anything might be the cause of anything. And what is true of me would be true of other things. The physicist could not meet the issue, for he would find himself in a world where he could not help me or himself. Nothing will be of any avail except a remedy that goes to the root

of the disease and tells me that I can only have an intelligible reason for existence provided I am part of the meaning of the world, so that something would have been thwarted or would have failed of realization in case of my non-existence. And this can have no other interpretation than that the primary ground in which my existence stands determined is one of intelligent prevision. I am part of the realized world, primarily because I have a place in the idea in which the world is conceived and in the purpose or intention through which it is fulfilled.

The necessity for the metaphysical explanation arises, therefore, out of the demand for an intelligible reason for the existence of things and the inability of the physical explanation to give such a reason. We come, then, to the *second* question, which is one chiefly of method. If the need of metaphysics in connection with the world of physical science be admitted how is its synthesis with the physical to be brought about? The easiest solution would be one that would regard the physical and the metaphysical as two worlds apart, so that over against the world of conscious agency with its ideal purposes and fulfillments would stand the physical world with its non-intelligent forces and mechanically determined results. Now while it is no doubt true that such a dualism would truly represent a great deal of the thinking of the time, yet it may fairly be said that reflection will always find it unsatisfactory. It cuts the sphere in which man lives, that of his conscious agency, too completely off from the physical world, the sphere of his objective activity. In short, it leaves him with two worlds instead of one, without any conceivable points of connection and each bristling with problems incapable of solution. The great objection to the dualistic solution, apart from its irrationality, is the fact that it is no solution at all of the question it set out to answer. What it set out to answer was a question of fact, How is the physical world so related to the metaphysical, that the metaphysical becomes necessary in order to reach

a theory of things that shall be finally satisfactory? Dualism answers the question by claiming that there is no connection between the two worlds. How, then, can one be necessary to the other? We must seek an answer that will be consistent with our question which is simply one of the mode in which a synthesis that is recognized as necessary shall be effected. Another alternative here is to regard the world of physical agency as mere appearance lacking in substantial reality. This is precisely the way in which some philosophers ask the physicist to look at his world. But a little reflection will show that this term, appearance, has no special significance until one has been assigned to it. By appearance its advocates may mean illusion and in that case the physicist would be asked to believe that his world is an illusion. He may safely be depended on to refuse to do anything of the kind. Again, by appearance its advocates may mean simply phenomenal. What he asks the physicist to believe, then, is that his world is purely phenomenal and the physicist will be able to give this his conditional assent. He will say that he regards the terms he deals with as symbols of underlying forces which do not appear, but that his world is not phenomenal through and through. It is a world of mechanically acting agents of which phenomena are conceived to be the effects. These agents are substantial existents although they do not appear among the order of phenomena. The physicist cannot allow the metaphysician a monopoly of the unphenomenal while satisfying himself with pure phenomena. Finally, the term, appearance, may simply carry with it the negative implication of the denial of real existence. What its advocate would mean to assert when he applied his term to the physical world is that the unphenomenal concepts of physics stand for mere conventions and represent nothing real. Metaphysically, they can be proved to be mere illusions. And the conclusion may be either that these concepts have no significance for reality; or, that they

are symbols of reality which, when finally construed, become metaphysical rather than physical.

Now, I apprehend that while the physicist would be disposed to resent a theory that proposed to reduce the whole unphenomenal part of his science to a species of bookkeeping, having only a conventional connection with reality, yet to the second alternative indicated above, namely, that his concepts are only provisional and partial, not final and complete determinations, I am disposed to think that nearly every intelligent physicist would yield his assent. That alternative simply involves the relativity of the physical conceptions in the sense that they are not exhaustive or final. It may be admitted that they do not profess to characterize the things with which they deal in a way that will exclude all other concepts of a different order. It may also be admitted that these concepts may be only symbols of things whose true nature could be represented, if at all, only in terms of a different order. Both of these admissions may be made and it will still be open to the physicist to deny that his concepts are merely of the bookkeeping order or that he is dealing with mere appearances. It is still open to him to claim that the aspect of the world which he embodies in his theory of matter and the form of agency which he calls mechanical, are real, and that while it may be true that these represent nothing final in the nature of things, they do, nevertheless, represent a form of the world's activity that is stable and well-grounded. And inasmuch as physics in common with natural science in general, only professes to deal with the activities as distinguished from the inner nature of things, it may reasonably claim that the order it deals with is a real mode of the activity of things provided it be stable and well-grounded.

We have seen that physics is led in its search for a stable ground of phenomena to connect them as symbols with a system of underlying substances or forces which stand as the real causal agents in the physical world. And

it is led, in its effort to define the mode of physical action, to formulate its principle of natural causation as embodying the form of agency which prevails throughout the whole field of physical activity. Now if we bear in mind that physics, in laying down these propositions, is not attempting to define inner nature but rather the activity of things, and that its point of view is that of the observer and describer of this activity, we may fairly construe its procedure here in the following terms. From the standpoint of the physical investigator the world presents itself as a group of phenomenal activities which he is led to regard as symbols and to refer to the operation of substances or forces that underlie them and are stable and persistent in their nature. He is also led, in order to secure a rational connection of the symbols of his world with the underlying forces, to formulate the principle of natural causation as the form of agency through which the phenomena of the world are produced. In all this he is dealing hypothetically with terms which never appear to him. Only the phenomena appear, and these are taken to represent, symbolically, deeper realities which do not appear. These are asserted as hypothetical necessities, that is, as conditions which must be postulated as real, provided the results of scientific observation are to be rationally grounded. The most abject devotee of matter never saw matter in his life, nor has he ever come within several inferential steps of its apprehension. Matter is a hypothetical necessity without which science cannot get on. Again, the form of agency that is embodied in the principle of natural causation is simply another hypothetical necessity of physical science. Its most abject devotee never saw physical causation or experienced the kind of agency which it asserts. He can only approach within several inferential steps of its presence-chamber. The physicist infers physical cause from the activities of his symbols which seem to fit into a calculus that excludes prevision and finality, better than into one that includes these. Because the introduction of

these terms of finality would confuse the problems of physics and render them too difficult for solution they are ruled out and the mechanical conception is reached by a method of elimination.

This, however, does not reduce his concepts to the artificial form of mere methodic expedients. They are essential features of the *gnosis* of science, determining its fundamental view of the world and proving themselves essential to the rationality and the progress of scientific knowledge. The scientist is committed to their defense, then, either as defining some real aspect of things, or as symbolizing it. Nevertheless, when he essays to defend the reality of his conceptions he finds that he has undertaken no easy task. Do you mean that if we could penetrate the constitution of things deeply enough we should come upon reals corresponding to the physical atoms or forces which you hypothetically posit? Again, Do you mean to assert that the form of mechanical agency which you have embodied in your principle of natural causation is anywhere to be found in the world? If so, then it must be possible to find instances where the interval between the cause and its effect can be traversed and nature, as it were, caught in the act of producing a result mechanically. The only hope of the physicist in this field lies in a different direction. He will never be able to reduce his hypotheticals to the terms of reality they are meant to be, and which, it must be admitted, the interest of science demands that they shall be, until he begins to see the need of connecting the world of mechanical agencies with a more ultimate and final world of prevision and intention. We have seen that in the metaphysical world that alone can claim reality which has meaning. If I can establish myself in the intention and purpose of the world, I am real, for then I have significance. This does not mean simply that I have significance for myself, but that I am an embodiment of an intention and purpose which is objective to me and includes me as a necessary part of a system of things.

The physicist will be led to a position from which he can justify his own doctrine of the world if he first becomes sufficiently oriented to recognize the connection of his own creed with the metaphysical doctrine of the world. His very exclusion of prevision and finality arises from his initial determination to know nothing of the inner nature of things. This position he has been forced to modify in his concepts of hypothetical necessity. But he has been able to hold to these without violating the spirit of his mechanical method. It is only when he is asked a really metaphysical question that he is in appearance driven outside his defenses, but it is my object here to show that his own welfare is involved in the answer to this question. We have seen that the whole physical doctrine of the world is developed from one point of view, that of the external observer who professes to characterize the world simply in terms of its movements. But these movements are symbols and taken abstractly have no significance. They present simply the outer shell of a system that is inwardly empty. To escape this irrationality, physics connects its symbols, as effects, with certain underlying causes or grounds. And this postulate of a reality which the phenomenon symbolizes is necessary in order to redeem the world of physics from irrationality. But when asked to give a reason why this postulate should not be regarded as a mere conventional cover of emptiness, the physicist can find no easy answer. He has never anywhere come upon the form of agency which he postulates, and the terms matter and force are simply names which represent nothing that is conceivable. The whole machinery of postulation seems to have been built up *in vacuo* and may be blown down with a breath. Now the touch which transforms his whole world into a system of reality rather than one of mere empty symbolism is found when the physicist recognizes the fact that his only real experience of agency anywhere is to be found in his own conscious activity. This is the point of *immediacy* that translates his world into concreteness.

The starting-point, as well as the norms of reality, is to be found nowhere else than in conscious experience. But having found both here the physicist, by a process of which he is doubtless more than half unconscious, translates them into universals and thus arrives at the notion of a world of agencies of which the phenomena of the world are symbols. From this notion of agencies in the world analogous to that which operates in consciousness, the notion of mechanical agency is arrived at by a process of elimination. The physicist can show that the result is a deduction from the behavior of the phenomena with which he deals. For it can readily be shown that the laws of the movements we call physical yield to mechanical treatment, whereas they prove recalcitrant when approached from any other point of view. The strong defense of physics, after all, is found in the fact that its method works and that its world of phenomena behaves in general in a way consistent with mechanical presuppositions. The mechanical presuppositions thus stand justified. They do embody the notion of a form of agency that is borne out by the conduct of the world as it reveals itself in space and time. But these conceptions, after all, represent only hypothetical demands and not anything which can be affirmed as real. The only thing that really exists to the physicist is the phenomenon. All the rest is postulated in view of the fact that otherwise the phenomenal world would be irrational. Science cannot breathe the atmosphere of irrationality, and hence the desperation with which it holds on to the deeper realities of the world. But when it would reach some intelligible concept of these deeper realities, or even when it would satisfy itself that they are reals at all and not empty illusion, the only source from which it can derive help is consciousness. In consciousness and the form of agencies which it reveals, science finds its own deeper faith in an agency that underlies phenomena, confirmed. And having reached this insight it soons becomes apparent that its own mechanical conceptions have been

derived from norms supplied by consciousness, by means of a process of abstraction.

The justification of the synthesis of the concepts of physics and metaphysics in the interpretation of the world of pure physical activity arises mainly in view of three considerations: Firstly, the metaphysical appeal to consciousness and its norms is necessary, in the last resort, in order to redeem the physical world from illusion and to ground it as a real aspect of a system of reality. We have seen that apart from this appeal, the whole mechanical framework of science loses its connection with the world of existence. But the synthesis is necessary, secondly, in order to meet the refinements of a complete theory of the world. Physics arises as a first interpretation of the phenomenal world, and its limits are determined by certain mechanical conceptions which have their justification, as we saw, in the character of phenomena as they manifest themselves in space and time. But we have seen that the physical interpretation, though valid and necessary as a first construction, does not meet the requirements of a final theory of things. A final theory is one that transcends mechanism and finds the original spring of things in intelligence and purpose. Mechanism itself is reached only by abstraction from intelligent and purposive agency, and the final theory of things will be arrived at only by a reversal of this abstracting process and by a return to the notion of the concrete.

The synthesis is justified, lastly, by the fact that it is necessary to a rational conception of the limits of physics and metaphysics. The physicist will feel enjoined from the denial of metaphysics by the insight that his own mechanical conceptions are abstractions from the concrete norms with which metaphysics deals and that it has derived from these norms the very qualities which fit them for final interpretation. On the other hand the metaphysician will feel enjoined from denying the reality of the physicist's world by the insight that the mechanical

concepts of physics, while lacking a basis in concrete experience, are nevertheless rendered necessary by the character of physical movements in space and time. Metaphysically, it may be denied that the space and time world is anything more than a mere symbol of a deeper reality: so be it; yet it cannot be denied that this symbolism is an abiding aspect of reality; that it is what Leibnitz calls a *well-grounded phenomenon,* and that it is, therefore, a *bona fide* part of a system of reality. On that account it must be respected and the validity of the physical interpretation will be unassailable within the limits of physical conceptions. It is in these conceptions that the actual limits are to be found. We have only to ask the question: When the requirements of physics have been met and satisfied are there any ultra-physical problems which arise and require a different type of explanation? This question may be very briefly answered. The problem of the relation of the physical mechanism to the real world is itself ultra-physical and can be answered only from metaphysical data. Again, if we critically analyze the mechanical conceptions, we shall find that in excluding intelligence and purpose they have excluded both initiative and finality. Initiative is excluded by the form of mechanical agency conceived as cause, for here all activity is represented as conditional and determined by activity external to itself. There is no initiative in a mechanical system, and this must be supplied either by Aristotle's postulate of the self-acting or by some equivalent. But the very concept of self-initiative is ultra-physical and can be conceived only by the use of the analogies of intelligence. Finality means simple a result or effect that is *intended,* and which therefore directs the energy of its own realization. But the mechanical notion of effect makes it the product of activity without intention. In the last analysis, however, a designless effect falls into the limbo of accident or blind fate, and in order to rescue it from irrationality it must be related to some purpose in which it is intended. The problem of

finality is thus ultra-physical and can be dealt with only in the light of data that are metaphysical. It is clear, moreover, that no theory of things can be considered complete if it does not supply a method of dealing with the ultra-physical problems which arise inevitably out of the physical investigation.

CHAPTER III.

ORGANIC MOVEMENTS.

THE rise of the living organism marks the appearance of a species of dualism in the world. Life in its relation to the physical activities that surround it seems to constitute an *imperium in imperio* in which the laws of the larger realm are set aside. The organism seems to be a self-centered individual whose movements have a definite aim, the conservation and development of the individual itself. To the sum of these end-seeking activities the term *living* is applied. An organism is a center of living movements. The whole secret of the organic world seems to be locked up in the meaning of the term *life*. The consideration of the *life-movement* will, therefore, constitute the central problem of our inquiry. Now, in approaching the organic world from the standpoint of the physical, the first question that arises is whether the analogies of the physical apply to the organic, and if so, in what way. The presumption of science is, of course, against any decided breach of continuity and in favor of the expectation, at least, that even so decided an innovation as the introduction into the physical medium of a life-movement will involve modification and transformation rather than a complete solution of continuity.

All physical phenomena were found to be reducible to matter and notion, and in biology the phenomena of life are reducible, in the last analysis, to corresponding terms.

Organic matter is called protoplasm or bioplasm and is composed of living cells which constitute the vital units in the world of life. These vital units are endowed with *plasticity* which involves a high degree of susceptibility to both modification and differentiation of structure (as Huxley points out in his article on Biology in the Ninth Edition of the Encyclopedia Britannica) as well as to the opposite process of integration on which Mr. Spencer puts emphasis in his *Principles of Biology*. Now, the term matter in physics is one that excludes the notion of internal or qualitative change. To endow physical matter with plasticity would unfit it for its function. The units of matter in the physical world, whatever these units are conceived to be, must be presumed always to continue quantitatively the same. But the unit of matter in biology must be susceptible to just this quantitative change. It is a modifiable term in which qualitative changes are constantly taking place, and it is this susceptibility to incessant transformation which fits it for its biological duty.

If we turn to the other biological element, motion, we discover a difference equally as great. It was found to be a characteristic of physical motion that it excludes the ideas of selection and end-seeking. The direction of physical motion can be calculated as a result of the composition of the forces which enter into its production. The cause which produces it acts not only *a tergo,* but also externally, so that in a sense it may be said to be fatalistically determined. The life-movements differ from these in taking the form at least of selectiveness and end-seeking. I say the *form,* for real selection and end-seeking are possible only where there is conscious foresight. But here we are dealing with life apart, as yet, from the presupposition of consciousness. The life-movement is selective in a sense that involves the plasticity of the life-substances, and this plasticity is not a mere passive susceptibility of that which is in itself quantitatively indifferent to change. The selectiveness, if it is not reducible to a purely physical

effect of composition, must be rooted in some original qualitative character of the tissue of which it is a function. In other words, the plasticity of the vital units will involve something more than mere passive responsiveness to forces which play upon them from the outside. It will involve, in addition to this, the possession of some original character of its own which counts for somewhat in the whole life-manifestation.

We are here simply pointing to a necessary implication of the selectiveness of the life-movement, without attempting any explanation of it. The situation represents a kind of dilemma. Either the selectiveness of the life-movement involves something more than the mere passive susceptibility of the living-tissue to externally induced change; or, it is reducible in the last analysis to a purely physical phenomenon, and the difference between life and inorganic motion vanishes. If, however, it does involve something more than mere passive receptivity, it follows that the life-units must be endowed with some active constitution of their own which they possess by virtue of their living character. Given the selectiveness as something more than passive susceptibility to change, what we call the end-seeking quality of the life-movement will have a ground in the original active character of the living-tissue itself. However much we may be led to ascribe to the operation of external forces, the outcome in the life of the organism, at any point in its development, will not be wholly explicable in terms of these forces. Something will have to be allowed for what we may call the germ of active individuality in the organism itself.

Returning now to the problem of method, the question is, to what extent the modification of the terms *matter* and *motion* which has been found to be necessary in order to adapt them to living organisms, will carry with it a corresponding change in the methods of physical science. We have seen that physical effects are produced by forces acting not only *a tergo,* but also externally, by way of com-

position or impact. But vital movements, by virtue of their selectiveness, must be referred to substances that are plastic, not simply in the passive sense, but in the sense of possessing an active constitution which in some way predetermines the form of the life-activity. The norm of selectiveness is thus located, so far as it is not reducible to the effect of external causes, in the living-tissue itself and represents what we may call a *predetermined trend.* In view of this fact it will be possible for us to determine the modification of the method of physics which the nature of the life-elements will render necessary. Biological, in common with purely physical, effects are to be referred to causes which act *a tergo,* that is, in the rear of the process; but the biological effects are not produced externally, by qualitatively indifferent forces which act in a purely quantitative way; they are to be regarded, on the contrary, as results of the internal changes which are taking place in the constitution of the living-tissue itself. Let us try to state the same fact in different words. The method of physics depends for its efficacy on the assumed internal rigidity of its forces. But that of biology involves the plasticity of the forces with which it deals. Its most fundamental changes are transformations in the living-tissue. But allowing for this difference we find that the antecedents of the life-movements are to be looked for, either in the environment, that is, among externally acting forces, or in the plastic character of the living-tissue itself. In these sources combined, the explanation of the selectiveness of the life-movement is to be sought. It does not seem, then, that the method of biology can dispense with the principle of natural causation. In physics a cause is an agent which not only operates behind its effect, but produces it externally, whereas in biology the cause is still to be sought behind its effect, but it does not produce it externally. Directly, this effect is the result of the internal plasticity of the living substance, while only indirectly and in part, it is referable to causes that are external. But

the essence of natural causation, as distinguished from finality, lies in its mode of getting effects by the forward push of forces which lie behind the effect and act without foresight. Biology, so far as it is a natural science, commits itself to just this species of agency. It is committed, then, to natural causation as its principle, but its use of the principle must be distinguished from the use made of it in physics in view of the fact that what physics aims at is a purely quantitative use of the notion of cause, whereas biology, on the contrary, dealing as it does with internal rather than external changes, aims to make a qualitative use of the same notion.

We may state the notion of causation which is fundamental in biology as that of the dependence of the phenomena of life on antecedents by which they are, in the last analysis, qualitatively, not quantitatively, determined. By qualitative determination we mean the *immediate* dependence of results on the internal changes of a plastic medium, whatever may be our conclusions as to their more remote and ultimate causes. But the whole of biological method is not deducible from a doctrine of *elements* alone. We must pass on from the elements to the *processes* of the living world, and in order to rightly apprehend these we must know something of the conditions out of which the processes themselves arise. At the outset a fundamental distinction has to be made between the *organism* on the one hand and what is called its *environment*. The organism is simply that synthesis of structure and function in which the life-movement concretely embodies itself, while the term environment is a compendious name for all the forces which act externally on the organism and in any way affect its development. The organism carries on its system of activities within this environment and these take the form outwardly of responses to the forces of the environment, while more internally represented, they are movements of adjustment and accommodation by means of which the organism exercises its selective function and secures its

own growth and development. It is right here, in view of this primary situation, that a line of fundamental cleavage shows itself among biologists. What is the essential relation of the organism to the environment, and which of these terms is to be considered most real? Shall the organism be regarded as a phenomenon of the environment, or shall it be considered something in itself and on a par with the forces of the environment? In answer to these questions some biologists adopt the first alternative, treating the organism as a mere phenomenon of environing forces. The living-movement is simply a response to the more primary movements of the non-living, while the life-substance itself, though endowed with plasticity, is regarded as purely passive. The whole movement has its initiative, therefore, outside of the organism and in the forces of the environment. The theory that would make the organic movement an effect of causes operating in the environment may be called the *mechanical* view of the situation, while that which finds in the nature of the organism itself one, and that perhaps the most important, condition of its selective development may be called *vitalistic*. Or, bearing in mind that the question here is where the primacy is to be located (in the environment or in the organism), we may employ the terms *phylogenic* and *ontogenic* to designate the opposing theories.

We have, then, among biologists two opposing views of the relation of organism and environment, the phylogenic and ontogenic, which serve to distinguish the more mechanical biologists from those who favor a less mechanical and more vitalistic theory. Let us then go on to the processes by which the life-movement realizes itself, and, in the first place, let us attempt a broad characterization of this movement in its relation to space and time. There are problems of distribution in biology in connection with which the category of space becomes of primary importance. But we are only very remotely concerned with the forces of distribution here. Our interest is rather in the prob-

lems of *origin* and *development* as connected with the central movement of life. The vital category in biology is *time* rather than *space,* and this has its explanation in the fact that biology deals with movements which are primarily qualitative rather than quantitative and that it is led, therefore, to substitute time-dimensions for dimensions in space. The constitutive unit in determining the nearness or remoteness of qualitative terms is one of time rather than space. What I mean may be perhaps more clearly expressed in another way. Qualitative changes that are not regarded as external to the substance which they affect, but rather as internal, give rise primarily to a *series* which has no space equivalent but embodies itself in a life-history. If the substance in which the changes take place were conscious, these would constitute its *experience.* Abstracting them from consciousness they constitute a life-movement, a history of the life-substance written in terms of its changing conditions in the time-series. Now, it is evident that while distinctions in space do not carry with them any change in the character of the matter distinguished; on the contrary, a distinction in the time-series always means a difference of character. Let us take the purely quantitative equation $a=b$ and let us suppose any number of divisions to be made in a while b is left unmodified; the equation $a=b$ still remains true. On the other hand let us supppose a and b to be the subjects of qualitative changes. By hypothesis the proposition a=b is now true. But if we suppose that in $a=b$ each stands for a mass of protoplasm and that a series of qualitative distinctions arise in a so that it becomes, say a jellyfish, it will no longer be true that $a=b$. One of our terms has become internally complex; its character is different while the character of the other remains the same. It is then no longer true that $a=b$. What the equation $a=b$ stands for after the character of a has been modified is a reversed genetic judgment. But as Professor Baldwin has shown in his "Genetic Modes," a converted

genetic judgment is never true, and the reason is that its copula is a time-dimension and the *is* or *equals* must be translated into *becomes*. The *a* (jellyfish) does not become *b* (protoplasm), but if we apply the symbol *a* to the complexly charactered living-substance of the present, then we must look for some genetic antecedent *b* in the anterior part of the time-series to which we may assign the rôle of subject. Let *b* stand for protoplasm and *a* for some present form of animal existence, say a soft-shell crab: the proposition $b=a$ will then have true genetic character and will mean protoplasm becomes soft-shell crab.[1]

Now, it is impossible to convert such a proposition and make it in any sense true. Soft-shell crab does not in any genetic sense become what is simpler than itself. We cannot read forward from *b* to *a* by any logical process; nor can we read back from *a* to *b* logically, for the connection is one of *becoming,* and genesis does not work backward. All this has been shown by Professor Baldwin in what may, I think, be called a first effort to distinguish between genetic reasoning and the reasoning of ordinary logic. What I would contend for in this connection is that the principle of genetic reasoning is perfectly consistent with what I have called qualitative causation; that we do not in fact drop the principle of causation in genetic reasoning. We do drop the quantitative form of that principle, which does not exhaust its significance, but we adhere to the principle of explanation it embodies, and what we really do is to translate the principle into qualitative terms. We thus reach a concept of causation that fits into the genetic mold and renders it applicable to the movements of history.

The *processes* by which the life-movement realizes itself are called *evolution* and *heredity*. Evolution is a general name for genetic progress, while the term heredity represents the means by which the results of progress are con-

[1] See Baldwin's suggestive discussion of genetic modes in *Development and Evolution*, 1902.

served. Biologists make a distinction under the general term evolution between what they call the ontogenetic and phylogenetic processes, the former applying to the life-history of the organism itself so far as it is to be ascribed to the internal forces of the organism, while the latter refers to the more external function of the environment. The whole causality of the movement is thus supposed to be distributed between the more external and mechanical, and the more internal and vital, forces. Here, again, the line of fundamental cleavage shows itself, and biologists divide into two schools accordingly as they are disposed to give the primacy in evolution to the ontogenetic or to the phylogenetic agencies. The exponents of the phylogenetic tendency favor, on the whole, a more mechanical conception of biology; one that will bring it and its methods into as close conformity to that of physics as the difference of material will permit. To the phylogenists the environment is the primary agent of the whole life-movement and this movement is treated as in a sense its epi-phenomenon. The ontogenists, on the other hand, are disposed not only to ascribe more reality to the organism, but also to give the organic conditions the primacy over the forces of the environment, as promoters of evolution. If now we turn to the conserving factor, heredity, we find the distinction between the two tendencies equally marked. The most burning issue of the science of biology in the generation just passed has been that of heredity. If we take the Lamarckian-Spencerian doctrine as representing one tendency, what we may call the Darwinian-Weismannian doctrine will represent its opposite. Distinguishing Lamarck's doctrine of inheritance from his theory of the factors which enter into evolution, the former becomes practically identical with the view that has been most fully developed by Herbert Spencer, to the effect that heredity is a direct function of the environment and that it operates by the transmission of acquired characteristics. This is clearly the more mechanical doctrine. The Darwin-

ian-Weismannian theory, on the contrary, amounts to a practical denial of the primacy of the environment in the business of inheritance. Weismann finds the true secret of inheritance in congenital conditions (the "back-door process" of Professor James) and denies altogether the transmissibility of modifications acquired during the lifetime of the individual organism.[1]

This doctrine of congenital heredity was at first connected directly with a theory of natural selection, which virtually left the whole process of variation to accident. In this form the Weismannian theory seemed to inherit from its Darwinian association an insurmountable objection in the fact that many variations have evidently been preserved which not only would not be of use to the organism in the first stages but, on the contrary, would be a positive detriment. The horns of the elk are an example in question. In order that these may be an advantage and not a hindrance to the individual that happens to become their bearer, a combination of other variations must be coincident with it. But a theory which requires us to believe in a fortuitous concurrence of a whole group of favorable variations, with the absence of unfavorable ones, makes too large a draft on our faith. It was only when this dilemma was relieved by the suggestion of a method which seems to have lifted the business of variation largely out of the rut of accident in which Darwin left it, that the Weismannian theory really attained to solid ground. The case in hand shows the close interdependence of evolution and heredity, inasmuch as the solution we speak of arose in connection with the agencies of evolution rather than with those of heredity, although the seeming deadlock in regard to hered-

[1] Until recently the leading biologists in America held to some form of the Lamarckian view of heredity, while in Great Britain and on the Continent the Weissmannian seemed to prevail. At present, however, the prevailing tendency seems to be toward the doctrine of Weissmann. Romanes appears to have been the last impressive advocate of the doctrine of Lamarck and Spencer.

ity no doubt supplied an important motive to the investigation. The Darwinians, as a rule, trust to natural selection as the one efficient agent in bringing about development, admitting other agencies, of course, but assigning to them a subordinate rôle. Now, natural selection, as it has ordinarily been conceived, rests on two pillars, (1) variations in the organism which are regarded as fortuitous, (2) the action of the environment upon the organism. The whole activity of the organism is represented as a *struggle for existence* in which those organisms that are most successful in adapting themselves to their environments and to changes in their environments have the best chance for survival and thus prove themselves the fittest. The process of successful adaptation is one, then, that depends on the *concurrence of variations in the organism with favorable changes in its environment,* so that when a change occurs which puts a premium on the existence of large antlers on the elk's head, these, fortuitously appearing, give an advantage to their fortunate possessor in the struggle for existence and thus prove him the fittest to survive.

The great weakness of natural selection, in its common form at least, consists in the fact that it depends so largely on fortuitous circumstances. That a favorable variation should fortuitously coincide with the appearance of a certain favorable juncture in the environment which also is fortuitous, is something that may happen repeatedly, but that it should occur so uniformly as to explain the evolution of living species is a supposition which strains our credulity. Another difficulty which has beset natural selection is the one we have pointed out above; the fact that the variation itself, as for instance the antlers of the elk, without an accompaniment of other variations, would prove detrimental rather than otherwise to its possessor and would act, not toward his survival, but toward his elimination. Now, it was owing to these difficulties chiefly that biologists formerly clung to the Lamarckian theory who otherwise would have been predisposed toward Darwinism.

The Lamarckians presuppose a certain selective function on the part of the organism by which, without modifying in any sense the influence of environment, it is able by the processes of *use* and *disuse* to adapt itself to environmental changes. Thus, when surface vegetation grows scarce and browsing animals are driven to the trees for sustenance the long neck of the giraffe becomes advantageous and is further developed simply out of the effort of animals to reach the height necessary to obtain the desired nutriment. Lamarckism here supplies an intelligible reason and a *vera causa*, though a very inadequate one, where Darwinism rests on pure accident; and this seems to secure to it a decided advantage. The Lamarckians, as we have seen, combine with this theory of evolution a doctrine of heredity which involves the inheritance of modifications acquired during the lifetime of the individual. Mr. Spencer has made us familiar with this concept of the life-process; an organism which grows up as a responsive center registering all the effects of the environment in its own constitution and transmitting a faithful copy of them to its descendants. Mr. Spencer's theory is one in which not only is the multitude fed but the twelve baskets full of fragments are gathered up and saved for the children.

Whatever may be urged in behalf of this theory of inheritance the truth is that it has been abandoned generally by biologists, who tend strongly to some form of the Weismannian doctrine. Assuming, then, that the Lamarckian view of heredity has been on the whole discredited and that the direct inheritance of acquired characters will have to be given up, the vital question which remains is one that concerns directly the agencies of evolution. The Darwinian theory of natural selection in its ordinary form is too much beset by accident and fortuitous concurrence to satisfy the better minds among the biologists. This has led, as we saw, to a lingering attachment to the Lamarckian doctrine which seems to give a degree of guidance and determinateness where Darwinism leaves

everything to accident. But biologists have been oppressed with the feeling that the Lamarckian conceptions are both inadequate and in some respects mystical. Even Lamarckism has no reason to assign for the survival of variations during the period when they would be detrimental rather than serviceable to the organism. Moreover, the Lamarckian is too much given to postulating an innate disposition as one of the factors of evolution, thus committing the mistake of imposing a scientific duty on a metaphysical datum. In view of this the only alternative open seemed to be natural selection in its ordinary form, which also had proved unsatisfactory for an opposite reason. The biologists seemed thus to be beaten helplessly from pillar to post, when a happy inspiration came to three men who had been observing the field from different points of view. One of these was Henry F. Osborn, a pure biologist, who, approaching the subject from the side of paleontology, with a side-light from psychology, and becoming dissatisfied with both natural selection and the Lamarckian theory of use and disuse, developed a hypothesis which he called *ontogenic adaptation* and put forth as an explanatory theory of the definite and determinate variation which is found in nature. Professor Osborn distinguished between two species of adaptation, the ontogenic and the phylogenic, and it is in the field of the former that he finds the phemonenon of determinate variation. His hypothesis, as he relates it, is briefly as follows. "That ontogenetic adaptation is of a very profound character. It enables animals and plants to survive very critical changes in their environment. Thus all the individuals of a race are similarly modified over such long periods of time that very gradually congenital variations which happen to coincide with the ontogenic adaptive modifications are collected and become phylogenic. Thus there would result an apparent but not real transmission of acquired characters." Now the principle involved in what Professor Osborn calls "ontogenic adaptation" had been discovered about the same

time independently by a distinguished psychologist, Professor Mark Baldwin, and a no less distinguished naturalist who had been specially interested in the problems of instinct and intelligence, Professor Lloyd Morgan. To Baldwin is due the name that has been finally adopted, *organic selection,* in which both Osborn and Morgan concur. Baldwin and Morgan have also worked out a terminology which Osborn accepts. They limit the term variation to congenital changes, substitute modification for ontogenic variation, using the term organic selection for the process by which individual adaptation leads and guides evolution, and *orthoplasy* for the definite and determinate results. The essentials of the theory thus seem to have been arrived at by three separate minds working independently in three distinct fields. And the indications are that the "New Factor in Evolution," to quote the caption of one of Baldwin's papers, has come to stay and that it will prove an important agent in securely grounding the whole process of evolution.[1]

Let us now attempt to state the situation in biology in terms that will appeal to the intelligence of the average laymen. The doctrine of evolution as held in biology is that the species of living animals and plants which exist in nature at present have developed from a few original and simple forms, all of which are, of course, reducible to the primary life-substance, protoplasm. These simple forms, or organisms as we shall call them, have had a history of growth and development in the course of which two opposite processes have gone forward together, (1) the differentiation of the simple structures into more complex struc-

[1] While Organic Selection is thus the product of three workers in the field, the principle which it involves seems to have been in the air, as it were, for some time. The writer remembers a conversation with his colleague, W. B. Scott, some ten years ago, in which the latter outlined a conception almost identical with that which was later embodied in the term organic selection. It seems to be an instance of the formulation of a doctrine which was germinating in the minds of many others.

tures and into different types of structure called species, (2) the integration or consolidation of structures so that they become more perfectly organized into a unity and more definite in the performance of their functions. Mr. Spencer points out how there is a concurrent development of both structure and function involved in the whole process of evolution. Now the causes or conditions of this development are to be found partly in those surroundings of the organism which are called its environment and partly in the living constitution of the organism itself. The former causes are called phylogenic, while to the latter the name ontogenic is applied. Biologists, as we know, split into parties on the question as to which of these causes is the more important; those who hold that the environment is the more important factor ascribing the major rôle to the phylogenic forces, while those who believe the constitution of the organism to be the more important place the major emphasis on the ontogenic forces. This distinction, as we have seen, influences the whole theory of evolution and heredity, the former being the name of the advancing process described above while the latter designates the means by which the accumulating results are conserved and made permanent possessions of the race. It is clear, then, how our conception of evolution will be shaped by our theory of the causes which determine it. But this theory will also influence our notions of heredity, for if we put the greater emphasis on the environment and the phylogenic causes and look on the organism as, in a great measure, a center of simple responses to its forces, we shall be disposed to look upon the organism as a simple register of modifications induced by the environment, and heredity as the means by which this register is preserved and handed down. No distinction between congenital and acquired modifications will seem to be vital, and heredity will be regarded as applying impartially to all modifications whether congenital or acquired. If, however, we put the major emphasis on the constitution of the organism itself

and on the operation of the ontogenic causes, the distinction between congenital and acquired becomes vital and the registry of heredity is restricted mainly to congenital modifications. We have here the ground of the distinction between the Lamarckian and Weismannian theories of heredity.

If, finally, we pass from the consideration of processes to that of the *agencies* by means of which these processes are realized we find that the field is occupied by two sets of theorists who divide on substantially the same fundamental issues. The Darwinians in general regard natural selection as the principal, if not exclusive, agent in bringing about the results. Now, natural selection recognizes both the terms in evolution, the organism and the environment; the phylogenic as well as the ontogenic causes. But natural selection puts the main emphasis on the movements of the environment. Given the organism in an environment which changes or is liable to change, how does this organism adapt itself to these changes so as to promote its own survival? Natural selection answers by pointing to *fortuitous variations* which occur in the organism and luckily coincide with changes taking place in the environment. These environmental changes have the right of way, so that if the fortuitous variation of the organism does not happen to fit into them, it suffers the penalty and is suppressed. Clearly, natural selection in its ordinary form is hard on the organism, leaving its fortunes pretty much in the hands of happy accident. Lamarckism, as we saw, represents a theory that has met favor from those biologists who have not been ready to take out an accident policy on the bank of natural selection. The Lamarckians have been impressed by what Professor Osborn calls "the evidence for definite or determinate variation" and have fallen back on the original constitution and the characteristic function of the organism (use and disuse) for its explanation. The old Lamarckian was, in the first place, a mystic, postulating an innate tendency in living matter itself. In this he is fol-

lowed by few contemporary biologists of any school. But he was, secondly, an ontogenist in his theory of natural agencies, pointing to the active efforts of the organism itself, displaying themselves in the use or disuse of organs which were favorable or unfavorable to survival, as the explanation of the determinate course of evolution. In this he seemed rather to be pointing in a right direction than developing an explanation that could be taken as adequate. For if he was seeking to lift the process of adaptation out of the limbo of accident he was not quite successful in his attempt. His own theory rests on the supposition that the variations which are preserved will be useful from the start. But this cannot be maintained. The increment of neck on the giraffe or the antlers on the elk would either be a disadvantage if not accompanied by a group of other variations, or, they would be useless unless so marked that use could not account for them.

The layman will understand, then, that it is the virtual failure of both the rival theories to explain the process of *adaptation* that has called forth the latest moves in the field of biological theory. The concurrent discovery of *organic selection* by three independent workers, each a leader in his own field, gives an unusual prestige to the new factor which is thus brought forward. How, then, is this new factor to be understood? The problem is that of definite and determinate adaptation, a phenomenon that is found in all cases where determinate results are reached: in the case of the horse's hoof, the giraffe's neck, the elk's horns, the aquatic quadruped's learning to stand on its hind legs and use its forelegs for wings. Stated in its most general form, it is the question why we find evolution working everywhere along definite lines and toward determinate results. This is the fact which neither natural selection nor the Lamarckian theory are able to explain. Both leave results too much without guidance; too much to the sphere of accident and irrationality. What organic selection does in this case is to settle upon the organism itself,

as the most important factor, and upon *congenital variations* as the only ones of primary value. Starting with the postulate of the organism as the subject of congenital variations which it is the business of the theory somehow to get conserved and securely placed outside of the individual history, in the phylogenic register of the race, its effect is to remove the stress of the movement from the individual variation and put it on a general tendency or adaptability of the organism, an adaptability that is likely to remain the same substantially over long stretches of time and that renders it possible, when any variation does occur, as for example the appearance of antlers on the elk's head, for the individual organism in which it appears to adjust its whole constitution to this change. This adjustment will involve, for example, a redistribution of the life-forces and a larger development of the bones and muscles of the elk's neck and shoulders at the expense of the more remote parts of his body. We have here an explanation of what the rival theories left to accident, the survival of a variation that in itself would in its first stages be detrimental or at least not definitely useful. This survival is secured by a species of blanket-mortgage which shields the young variation by hiding it in a group until its majority has been reached.

No theory is obliged to show how variations may survive outside of definite and determinate limits, for evolution has its negative side and its unwritten history of variations which failed to survive either because they did not fall in with the general trend of the organism in which they appeared, or because they were able to find no point of accommodation to the environment. The great fact which a theory may be held to explain is that of determinate variation whose history is written in the results of evolution. Every animal and every plant, where the stages of its history have been successfully traced, become a registry of the survival of a series of variations which tend along definite lines and toward determinate results. The theory of *organic selection*

by connecting this series of fortunate individual variations with a wider sweep of organic susceptibilities for modifications which include whole groups and fields of changes,—but which move, nevertheless, along definite and determinate lines,—indefinitely narrows the range of accidental and fortuitous conjunction and makes the foundations of the science by so much the more rational.

This will become apparent if we consider two or three circumstances. We have already pointed out how the theory of organic selection accounts for the preservation of a variation during what we may call the period of its minority. It is nursed until it has reached the point of growth where it becomes in itself a useful possession. But, objectively, the environment may be unfriendly, or at least indifferent. The closeness of the trees may interfere with the horns of the elk, while yet his peaceful environment renders his horns of little use for defense. In this case the antlered elk ought to be eliminated. But organic selection supplies a reason why he may be able to survive even this period of stress. In the first place the general adaptability of his organism to the new variation would tend to put him in a position where he would be able to maintain himself with his own species. But in addition to this, organic selection shows how the waiting game may be successfully played so that the favorable change in the environment, however long it may be delayed, will find him there awaiting its coming. The antlered elk will then have his day because in the new conditions, and the new and more formidable defense he must put up in order to defend his own life, his antlers have found their true mission.

The problem of *variation* which the new factor of organic selection is brought forward to explain is at present the most vital issue in biology. The value of organic selection is recognized by such authorities as Professors Poulton, Conn and Headly, not to name many others, but its final significance for evolution is still in

debate. Poulton is strenuous in maintaining the position that organic selection, while a valuable extension of the principle of natural selection, is to be held subordinate to it as one of its methods of working. Natural selection he still regards as the one supreme agency in evolution. To this contention Baldwin and Lloyd Morgan are disposed to yield at least a qualified assent; while Osborn refuses to regard organic selection as simply a mode of natural selection, but proposes to substitute it for both natural selection and the Lamarckian principle of the inheritance of acquired characteristics; of course within the field of definite and determinate variations to which it belongs. With Osborn's view, E. B. Wilson, T. H. Morgan, not to mention others, are in substantial agreement. The point of the difference is one that the layman may not readily grasp. If we call the general capacity of the organism to adapt itself constitutionally to individual variations, its power of self-adaptation, or better still, its plasticity, then it will be found that the point at issue has reference to the origin of this plasticity. Osborn and those who agree with him admit that in some cases the plasticity of an organism may be traceable to natural selection, as for example "where an organism has been restored to an environment which some of its ancestors have experienced," but they contend that the burden of proof will always be with the advocate of natural selection. The whole phenomenon of plasticity is explicable only when we regard the original life-substance as endowed with a plastic quality that clothes it by nature with the power of self-adaptation. The opponents of this view, which I understand to include Baldwin and Lloyd Morgan as well as Poulton, contend that the only plasticity which can be recognized is one that is itself produced by natural selection. I think we have here the last and one of the most significant manifestations of that line of fundamental cleavage which has tended to separate biologists into two different schools on all the fundamental issues of the

science. It is the old issue between the more mechanical and the more vitalistic tendencies taking on its newest form. The question at issue between the parties seems to narrow itself down to a point which to superficial observation might be negligible without detriment to any of the vital interests of the science; yet this would no doubt be a mistake, inasmuch as Osborn urges against the Morgan-Baldwin-Poulton view, "That the remarkable powers of self-adaptation which in many cases are favorable to the survival of the individual, are also in many cases detrimental to the race, as where a maimed or mutilated embryo by regeneration reaches an adult or reproductive stage." "It is obvious," he continues, "that reproduction from imperfect individuals would be decidedly detrimental, yet from the view taken by the above authors, such reproduction would be necessary to secure the power of plastic modification for the race." Let us suppose, now, that plasticity is in all cases a product of natural selection; it would follow that, notwithstanding the function assigned to organic selection, all directive or guiding agency had been taken away from living matter itself and hence from the organism. The organism derives its self-adaptability to change which qualifies it for the office of definite and determinate evolution, from adaptations it has already made and so on *ad infinitum*. We thus strip the organism of all directive and determinative agency and locate this in the environment, reserving for the organism only blind variability at first which is trained into determinateness under the tutelage of the environment. This is the doctrine of those who aim to reduce biology as much as possible to the strict requirements of mechanical science. On the other hand the vitalists, while they find it more difficult than do their opponents to maintain their scientific orthodoxy, are, nevertheless, representing a definite and intelligible tendency of the science. Just as the more mechanical tendency in physics has arrayed against it the opposing tendency of the dynamists, so here

in biology we find those who are disposed to find in the original elements of the life-movement the most important norm of that determinateness in the process which has supplied biologists with some of their most vital problems.

If we study the mode of selection which has been called organic we shall find that it tends to substitute a species of wave-movement in the trend of organisms for that of individual variation. The motion seems to be one of ebb and flow, the group of possible variations in a certain field of experience being determined by the swell and conformation of the tide. This is something that organic selection as a descriptive name of a process does not explain. Why should there be organic rather than individual selection, and how does it operate? The answer to the first question has already been given. It is more explanatory of actual history than any other theory that has been proposed. How, then, are we to conceive the movement involved in organic selection as being realized? This is a question of *modus* in answer to which Baldwin (and he is one of a group of psychological biologists who suggest a function of mind) suggests the agency of pleasurable and painful consciousness. According to the law of circular motion, which Baldwin works out in his *Mental Development of the Child and the Race*, it is suggested that the tide which represents the fullness of life would, by virtue of its pleasurableness, not only tend to its own continuance but also to the *multiplication and preservation of favorable variations*, while in the case of the ebb of life which would be accompanied by a painful consciousness, the effect would be the opposite. An explanation of the survival of favorable, and the suppression of unfavorable, variations is thus suggested in the pleasure-pain aspect of consciousness. Baldwin, while not going so far as to propose the pleasure-pain consciousness as a *vera causa* generally present in evolution, makes the suggestion that something analogous to it operates from the beginning to the end of the life-movement.

Hitherto we have concerned ourselves exclusively with the concepts and problems of biological science. We now turn to the problem of the synthesis of natural science with metaphysics in the field of organic movements. We have seen how the genetic process falls under the operation of the principle of natural causation in time. Our review of the problems of biology and their proposed solutions shows that an explanation in order to be satisfactory must, in the last analysis, satisfy the requirements of natural causation. It must propound causes which are *verae causae* and the operation of these causes must lie in the field of possible determination. Moreover, the biologist, like the physicist, deals with his world under the general notion of phenomena and ground. We have seen that physics connects its phenomena as effects with the operation of underlying substances or forces to which it applies the name matter. Now, the material or ground-term in the field of the organic is the life-substance itself, protoplasm or its constituent, the living cell. It appears, then, that the ground-term in biology is also to a degree phenomenalized. We can discover the distinguishing characteristics of living matter (those which differentiate it from matter that is not living), and the concept of matter in biology is, so far forth, more than the concept of matter in physics. The same thing is true of the concept of motion. The life-movement is definable further than the movements with which physics deals and its concept is correspondingly richer. Let us ask, then, in what particular respects the ground-motions of biology are richer than those of physics. The answer may be given in a few words. The terms of physics, as they are conceived and employed in the physical processes, have no internal character, no qualitative properties which in any sense influence the form of their movements. In biology, however, the primary matter, protoplasm, or the living cell, has an internal character. It is plastic, that is, susceptible to qualitative changes. Moreover, it is a debated question among biologists whether this life-substance may

not be originally plastic in determinate ways,—whether, in fact, it may not be *selective* in its very nature. If, now, we turn to the life-movement itself we see that it is no longer qualitatively indifferent, but that it is overtly selective and discriminating. It acts as though it had a taste and as though some things pleased it while others it disliked. Furthermore, it is clearly end-seeking. Its selectiveness is not haphazard, but under the general guidance of the idea of what is good for the organism. It is this in appearance at least. The biological elements are richer than the physical by the whole diameter of their qualitative character, which, as we have seen, embraces original plasticity, selectiveness and end-seeking.

Now two main questions arise in this connection, (1) To what extent does this qualitative character of biology transform it into a teleological science, (2) What is the vital connection between biology as a natural science and a metaphysical interpretation of the world? The qualitative character includes, as we saw, original plasticity, selectiveness and end-seeking. Whatever our ultimate theory of these qualities may be, on their face, at least, they constitute a teleological character. It cannot be denied that life is in some sense teleological. Let us ask, then, in what sense? If we take a process that is teleological through and through we shall find that it is not only selective and end-seeking, but that this teleological movement forward has its root and spring in the foresight of some intelligently conceived purpose. In short, the spring of selective end-seeking is design. Comparing a genetic movement with the form of complete teleology we find that while in its forward reach, that is, prospectively, it is teleological, inasmuch as it proceeds selectively to the realization of an end, yet regressively, or in view of its source, its origin is not traceable to design or purpose. The utmost that can be allowed here is an original spontaneity which does not act by purpose or design and in regard to which it is an open question whether any measure of determinateness is to be ascribed

to it. This being the case, the genetic process in its regressive aspect, which is the one of production, is non-teleological and subject to the law of natural causation. Biology as a natural science may then admit teleology and teleologically operating forces in the *prospective sense.* But it cannot admit these in the *retrospective* sense.

It may be asked in this connection whether such a restriction of teleology would exclude purpose and design altogether as causes. To which we answer that it would not as individual agents. Among conscious individuals the purposive form of agency may work to the production of results which possess biological value, that is, they further life. But in a scientific construction these purposes and designs will be ranked, along with other causes and conditions, under the general principle of natural causation. The truth is that biology may deal to any extent with teleological forces and agencies so long as it remains true to natural causation as the principle under which their activity is ultimately construed. This conclusion will hold good in view of both the mechanical and the vitalistic tendencies in biology. The most that the extremest vitalist who avoids mysticism would claim for his original life-substance is that its primary properties are such as to determine in some measure its subsequent activity. These would not be thought of as emanating from innate design or purpose in the life-substance. This residue of determinateness would be ascribed by the more mechanical theorist to the operation of natural selection. In neither case, then, would teleology be brought in as a *vera causa.* Given a life-substance with a certain original constitution, which is represented under the term plasticity, the schools differ as to whether this plasticity is to be regarded as indefinite and indeterminate or as a somewhat definite and determinate susceptibility to variations. In the one case the ontogenic factor is minimized, while in the other it is magnified. In both cases the results contemplated are assumed to be brought about by natural causes.

We come, then, to the metaphysical question proper and the point here is to determine, not how the biologist may be a metaphysician, but rather how the limits of his science will lead him by rational considerations to a metaphysical interpretation of the world. And by way of a preliminary it needs to be clearly understood that there is no question here of substituting the categories of metaphysics for the processes of science. The metaphysician is as jealous as the biologist himself of the prerogatives of science, and if metaphysics insists that the world must, in the last analysis, be referred *regressively* to design and purpose, this requirement is made in the interest of the biologist as a metaphysician and not as a natural scientist. It is a claim that is urged on the ground simply and solely that it requires a synthesis of the scientific and metaphysical interpretation to give us the full meaning of our world. Let it be understood, then, that *metaphysics, in proposing its teleological explanation of the world, is not proposing teleology or purpose as a substitute for natural causation.* It is only contending that natural causation, however far it may be carried, does not exhaust the meaning of the world, but everywhere needs to be supplemented by the notion of teleology or purpose as supplying to it a completely rational ground.

Let us then grapple directly with the metaphysical question. We have seen that, in general, metaphysics finds its vital connection with science by translating the ground-term of science into its own ground-terms of idea and prevision. Now the ground-term of biology is its original matter or life-substance. This, as we have seen, has been qualified with a character called *plasticity.* If we analyze the notion of plasticity we find that it implies at least passive adaptability to changing conditions by which it may be affected. But the notion of passive adaptability is not ultimate. We cannot stop with *mere* passiveness. Passivity implies more active and aggressive initiative somewhere. And just here theories divide.

The vitalists contend that a certain active initiative must be ascribed to the life-substance itself, while their opponents deny this and ascribe all active initiative to the environment. Both schools concede that active initiative must exist somewhere and that mere passivity cannot be allowed to stand alone. The more mechanical school of biologists traces the whole active initiative of the evolution movement, in the last analysis, to the environment. It is an exclusive function of the phylogenic forces, whereas the vitalists divide this initiative, referring an important share to the organism itself, while a function is also recognized as belonging to the environment. The initiative is thus distributed between ontogenic and phylogenic agencies.

The common faith of all schools is that active initiative must be found somewhere in the world and that without it the life-process could not be rationally explained. Now, these forces of initiative wherever they are to be sought are the *verae causae* of the whole evolution movement. Biology as a natural science construes their agency under the notion of natural causation. But the question comes up here as it comes up generally in connection with the world as a whole, Can the principle of natural causation be taken as giving a complete and finally satisfactory explanation of the world? and the answer must, I think, correspond with the general answer. The natural-science account of the life-movements is one that conceives them to be genetically teleological, that is, selective and end-seeking. But regressively it resolves all this teleology into the operation of natural causation. But the question arises regarding natural causation,—Is it self-explanatory or does it point to something more ultimate than self? It obviously points beyond self, for we have seen that no agency can be taken as final and self-explanatory except one that includes an intelligent conception and foresight of the result which it is selectively realizing. In short, the world must mean something in its *inception,* in order that it may have real meaning in its *outcome.* Applying this principle, we are

led to see the necessity of a further interpretation of the data on which our natural-science construction proceeds. Natural science, in dealing with the phenomena of life, sets out with the presumption of the operation of certain forces which take the active initiative in its processes. These forces are presumed to act in accordance with the principle of natural causation, and the whole scientific treatment of biological phenomena depends on the validity of this presumption. We have seen, moreover, that the metaphysical interpretation does not call the principle of natural causation in question as a valid principle of science; it simply calls in question the presumption that such a principle can exhaust the meaning of the world or give an interpretation which will be completely and finally satisfactory. And the plea of metaphysics here as elsewhere is that our world-theory can be rendered complete and satisfactory only when the teleology of the genetic process is referred back through natural causation to an intelligent foresight and purpose which rest at the heart of the world and comprehend and ground all its processes.

It is to be understood that the reference of the world, whether the field of phenomena in question be that of biology or some other branch of science, to intelligence and purpose as its supreme principle, is a metaphysical reference and not a reference of natural science. It is not open to the biologist as a natural scientist to recognize the supremacy of any other principle than that of natural causation. But it is open to the biologist as a metaphysician to call the *final* supremacy of that principle in question and to subordinate it to the principle of intelligence and design. Nay, it is incumbent on him to do so, and he will find, if he makes the right synthesis, that his metaphysics will not interfere with but will rather vitalize, his pursuit of natural science, while on the other hand he will see to it that his metaphysics is kept sane and rational and free from mysticism by the close company it keeps with the concepts and methods of science.[1]

[1] See Appendix *A*.

CHAPTER IV.

CONSCIOUS ACTIVITY.

CONSCIOUSNESS is the medium through which alone anything becomes conceivable or knowable. It would seem to follow from this that everything conceivable or knowable must exist as a modification of consciousness. Now there is an important sense in which this is true. If we avoid the phrase, exists solely, which begs the question, it is a defensible position that the objects of perception or conception are modifications of consciousness. Or, if we assume for the sake of the argument that objects exist apart from consciousness we are still taking a defensible position when we say that in order to be perceived by us or conceived by us, they must present themselves to us in the form of our perceptions or conceptions. Thus, confining our view to perception, whatever the tree out on the campus may be in itself, to me, as an *immediate* object it is a bunch of perceptions. I do not say at this stage that it is nothing more than a bunch of perceptions. Perhaps I shall never have occasion to say so. But the immediate object which appears to my senses is a bunch of perceptions, for as I discover, and as I am told, when I shut my eyes the object vanishes; but not the real object which I suppose to exist out in the campus. *That* I presume to continue in existence, while my perception, which alone was immediately present to my mind, has ceased to exist. This is, no doubt, what Berkeley meant when he identified

existence with perception. The truth of his assertion is indisputable if we confine the reality of things perceived to our perceptions of them, that is, to that which is immediately present to us when we perceive them.

Let us suppose, however, that the intention is not thus to confine the reality of things, but that we mean to designate by the real existence of things all the reality that can be affirmed in connection with our perceptions. Suppose, for example, that I should say of the tree which I see out on the campus that all the reality it possesses is present to me in my perception, so that its *esse* is exhausted in my *percipi;* then when my perception ceases to exist the tree has ceased also and may be treated as non-existent. That is a logical conclusion if Berkeley's dictum be taken in an unqualified sense. But Berkeley recognized the necessity of qualifying his own dictum, inasmuch as he found that in its unqualified form it was contradicted by the whole behavior of the world. Things do not act anywhere within the range of experience as we would expect them to behave if their *esse* were wholly identical with our *percipi.* Nor does it better the situation to say that the things we assume to persist are the perceptions of other minds. These other minds do not find them so; we do not find them so. The perceptions of any mind are perishable while we are obliged to say that the real thing persists. If, recognizing the dilemma, we follow Berkeley and say that the real things are ideas in the mind of God, we have perhaps reached a sound metaphysical position, but we have made a long leap to get there. And the theory of perception remains as defective as it was before. Hume, following Berkeley, repudiated this metaphysical leap and tried to make the best of the theory of perception. To Hume, also, *esse est percipi,* but this leads him to deny the existence of what we have called the real object. The only existent is the bunch of perceptions which perishes in the using. The result is a thorough-paced phenomenalism which denies

all substantial reality and finds the heart of the world losing its identity at every passing moment.

Such a doctrine, we contend here, is its own refutation. Consciousness cannot abide in a world which goes no deeper than its own perceptions. The case is not very much improved by the makeshift of Mill, who also found the world of perception untenable and sought a way out of the difficulty by postulating perceptions *plus* a background of permanent possibilities of perception. It is clear, however, that this background, if not also perception, which would destroy its value, is only a name for the problem to be solved and in no sense a solution of it. It has the value, of course, of being an acknowledgement of the reality of the problem, but no other significance can be attached to it. Perhaps, then, we have been on the wrong trail and we shall find that *esse est concipi*. The conceptionalists (rationalists as they are called) may have a gospel in which we can believe. The conceptionalist before Kant, from Descartes down, in so far as he was true to his principle, believed just as firmly in the identity of reality and conception as did Berkeley in the identity of reality and perception. The result was that things were thought to be constituted of organized bundles of conceptions. Consciousness was now creative in the rôle of conception rather than in that of perception; that was all the difference. It is true that in conception we reach the notion of substance and persistent being. But what we ask here is, whether substance and persistent being are to be regarded as purely notional so that they have no other existence than in our conceptions. If this were true it ought to be possible for us to deduce the order of the world from the abstract order of our conceptions and the phenomena of the world from the content of our conceptions. This we find ourselves wholly unable to do. Not only so, but we find ourselves wholly unable to conceive how such a world could be possible. If we take any of our fundamental conceptions, that of cause, substance or ground, for example, and employ it in a real way, that is,

in thinking things, rather than in thinking about them, we find that a distinction of the same type as that which arose in perception comes up here between our conceptual process and the reality whose existence is thought. We think the world as causally determined or as persisting in being. But these thoughts are perishable and must lapse in our own consciousness, or in the consciousness of any being of our type. We cannot stand forever like Atlas, bearing the world on our shoulders. But when we let go, what becomes of it? We do not and we cannot, think the world as ceasing to be causally determined when we or other beings are not thinking under the causal category. If such were really the case it would be interesting to know what transpires at the north pole when no mind is regarding it under the causal category.

The truth is, that throughout the whole range of what we may call its cognitive activity, consciousness is not constitutive of the real existence of things. The *esse* of things is neither *percipi* nor *concipi*. But it is certainly true that *percipi* and *concipi* are constitutive of something, and we may ask here, what it is they bring into existence and how this creation is related to real existence. Let us first consider perception. When I perceive the tree on the campus, what is immediately present to my mind is a bunch of perceptions and I have found that these may lapse without rendering my object non-existent. If my perceptions are not the object perceived, what are they? The only answer I can give here is that they somehow represent to me an object which I conceive to exist independently of my perceptions. That is, the real object has an extra-perceptional existence. Of this extra-perceptional object my perceptions are *symbols*, and I mean by symbols terms which represent as effect represents underlying cause, but not pictorially. The symbol is not, or at least need not, be *like* the existence it symbolizes. What, then, does my perception-object symbolize? Here, I think, we come upon a factor which has been too much overlooked in epistemology.

Until consciousness becomes able to reflect, the symbol will be taken for the reality. It is to the reflective consciousness the perception-object becomes a symbol. How, then, is this separation of symbol from reality effected? Manifestly by the fact that we conceive the object as existing when our perceptions have lapsed. In the middle of the night I recall in memory an image of the tree on the campus and this arouses the thought of its existence which is simply the conceptual affirmation of its existence. I think the tree as existing when my perceptions have lapsed, or at least when they have ceased to be perceptual and have become reminiscent. I am thus led to distinguish the percept-object from what I may call a concept-object, one that continues to exist after my perceptions have lapsed. The point I wish to emphasize here is the fact that what the percept-object symbolizes is the concept-object. My perception stands as a symbol of objects which I conceive as continuing to exist after I have ceased to perceive them. But they could not so persist in existence to me after I had distinguished my perceptions from them as their perishable symbols, if I did not conceive these objects. They must exist to me in conception, that is, I must think them as existing before I can have grounds for distinguishing their existence from their perceptual symbols. It is, in short, with direct reference to the concept-object of thought that the percept-object becomes symbolic.

The concept-object thus becomes an important term in cognition. Locke anticipated the distinction between the concept-object and the percept-object when he made his famous partition between the primary and secondary qualities of things. The secondary qualities are simply the percept-object, the bunch of perceptions which perishes in the using, while the primary qualities are the concept-object, the object conceived as existing more permanently and fundamentally. This will appear more clearly if we consider what qualities Locke regards as primary. They are extension, figure and solidity. Now, figure is plainly

not a primary quality in the same sense that extension and solidity are to be taken as primary. Figure is a determination of space while extension is of its essence. Solidity is also a simple quality by virtue of which a thing maintains itself in existence against whatever would suppress it. Taking *extension* and *solidity*, then, as the really primary qualities of things, it is obvious that these belong to the concept-object and not at all to the percept-object. What we perceive is the object, not as extended but as large or small, as filling up more or less of our visual or tactual field. Nor do we perceive the object as solid, but rather as resisting our pressure, as refusing to get itself out of our way. Reflection tells us that what fills up our visual perspective is extended, and that an existent which is capable of resisting our efforts to get into its place, is solid. The primary qualities belong, therefore, to the concept-object which the percept-object symbolizes, while the secondary are qualities of the percept-object. Consequently the primary qualities seem to be, and are in fact, more fundamental to the real existence of the object than are the secondary.

The reason for this will shed light on the cognitive relation of consciousness to existence. The object of conception seems to be more fundamental than the object of perception because it does, in fact, lie closer to the heart of reality. We have found the heart of reality, not in the cognitive activity which has a presupposition, but rather in that central agency of will in which consciousness goes out in a concrete effort to overcome and realize the world. It is in this effort-movement, if we may be allowed the phrase, that consciousness fundamentally asserts itself and expresses its reality. The cognitive activity arises, as we saw, in connection with this more fundamental form of agency in order to serve as its guide by symbolizing the existences with which it deals. We learned in a former chapter how the dog's perceptions of the tree serve to guide his deeper agency around obstacles by which it would

otherwise be thwarted. Here we wish to point to the fact that it is the experience of this deeper agency which leads the reflecting consciousness to develop the primary qualities of things. Extension and solidity come to stand specially for that which thwarts opposing agency. Their immediate spring is resistance, the sense of rebuff which the dog experiences as well as the man, developed by reflection into cognitive forms. These become symbols, therefore, and take their place in the cognitive world in connection with other symbols; but symbolizing more directly the experience of the deeper agency, they take rank in the cognitive world as primary rather than secondary qualities.

We have seen, however, that both the secondary and primary qualities take their place as symbols,—that neither can be identified with the real existents to which they refer. Is it possible, then, for us to say anything as to the nature of these real existents which our cognitions symbolize? We deal with the question here not as a metaphysical issue, but as a central problem in the theory of cognition. The whole result of cognition is the creation and development of symbols, while the *esse* of things lies outside of both *percipi* and *concipi*. Berkeley and the rationalists are both at fault in mistaking symbols for things symbolized. What can I say, then, if the tree out on the campus is not to be identified with either my perceptions or my conceptions? One resource is to regard it as a *thing in itself*, in the Kantian sense, and as therefore inaccessible to knowledge. We may in fact reach this conclusion about it, but if so the time is not yet. There is an important clue which we must follow up before we shall be ready to give up in despair. We have seen how the secondary and primary qualities of the tree have developed as symbols of an existence that in some way transcends them. The symbols are not the real existent; they only *represent* it in a way that does not tell us what the real is like. But they designate an existent, and the primary

qualities designate it more fundamentally than the secondary. May not this be because of their relation to that deeper agency which operates at the heart of consciousness? We saw how the dog in his collision realized a deeper experience of the tree in connection with which the perceptive symbols were developed and acquired a meaning. These symbols enabled the dog to avoid the tree in subsequent adventures and thus to escape the deeper experience of the painful frustration of his efforts. The dog's intelligence is not able to go very far, perhaps, in interpreting its experience, but let us substitute a human intelligence that is capable of reflection. Out of its deeper experience the reflective consciousness will develop the primary symbols and these will have immediate reference to its deeper experience. I do not mean that they will directly symbolize the volitional agency of consciousness itself. They are rather symbols of something that is capable of painfully thwarting its agency and which it must needs respect. We find here what I conceive to be the core of the matter. The cognitive symbols represent a real existent which is nevertheless not identical with any of the terms of the representation. The existent can truly be said to exist outside of its representation, for what we mean to assert when we say that things exist which our cognitions symbolize, is that there exist agencies apart from the agency of our own consciousness which are capable of painfully thwarting our efforts. We call these existents agents because we cannot conceive agency as being thwarted except by other agency *like it in some sense,* thus employing the analogy of our own consciousness to secure the first term of intelligibility. My cognitions thus symbolize to me the real existence of an agency not my own which is capable of painfully thwarting my efforts. When, therefore, I say that the tree out on the campus has an existence which my cognitions only symbolize, I mean that what I perceive or conceive as a tree is a real agent, that it exists

as an energizing something that is capable of painfully thwarting the efforts of my own energy.

A brief answer to a metaphysical question will complete this part of our discussion. If the real existence of things in general, is thus found to consist in their exercising an agency apart from the agency of the consciousness in which they are cognized, can we say anything determinate as to the nature of these things? Our cognitions symbolize them but do not constitute their real existence. Their real existence consists in their agency. Can we say anything further regarding their nature? There are just two alternatives open. We may apply to them the analogy of our conscious agency and by its critical use develop some definite concepts under which the nature of things may be to some degree determined; or, we may deny the validity of this use of analogy. The alternative, then, will be to leave the nature of objective existence wholly undetermined. Our cognitions would then symbolize to us existents whose real nature must forever remain completely unknown. So much metaphysics seems to be necessary in order to determine the connection of our theory of cognition with the problem of the ultimate nature of things. The analogy of the deeper experience of consciousness is the only guide we have to metaphysical conclusions.

Having determined as far as is possible at this stage of the discussion, the relation of cognition to the existence of that which is cognized, we now take up the question of the *method* by which consciousness realizes the world, both in the sphere of cognition and in the field of its deeper agency. Our first problem, then, is that of the method of cognition. We are aiming to deal with essentials here and shall omit details as much as possible. When we speak of the method of cognition the plain man naturally thinks of perception and has a vision of the object as rising up immediately before him. Now, the immediacy of the perceptions cannot be denied. If the brain-physiologist says to the plain man, "You have missed altogether the brain-process which

must be gone through before your perception becomes possible," and if the chorus be swelled by the physicist who says, "You have also missed the physical process by means of which the stimulations of the environment have been conveyed to your organism"; it is open to the plain man to reply, "None of these things have I perceived at all. What is immediately present to me is my perceptions. They are there. I know not how they came to be there." The plain man's word must be taken on the question of fact. It is only when he begins to theorize that he becomes unreliable. It would seem as though the experts and the plain man had missed each other's points of view and the reason is clear enough. They were thinking of two different orders of facts. The plain man's facts are what consciousness knows when it perceives its object. The facts of the expert are not known to the consciousness that perceives its object, but to an observing consciousness that has been investigating the conditions of the perceiving consciousness's activity. What the plain man says is "I see my object immediately"; and he is right. What the experts say is, "We have discovered certain processes in the physical world and in your nervous system which must take place before your perception is possible," and they, too, are right. The perception of the plain man is a phenomenon that is immediately related to his own consciousness. Of this he is sure so that he seems to have an immediate cognitive relation with the existent object itself. But in this part of his experience he is deceived. The immediacy is all in his relation to his perceptions. There may be a thousand steps between him and the existent object; the physicist and the physiologist have shown that there are many. The tree out on the campus, which I seem to behold with such immediacy, is in reality very remote. The movements of light or sound must pass through a medium involving many vibrations before they reach the outer end of a nerve of sight or hearing. They must then travel as nerve-vibrations over a number of

tracks, making the necessary changes at all the nerve-centers until they come to the nerve centers directly connected with perception; these become active and perception arises in connection with this last act.

If, now, we say that the real world consists of two existents, my own consciousness and the tree which I perceive, these will constitute the really co-ordinate terms in my world. It is primarily a world of existents, and everything else will be reducible to the relations among these existents. The transaction that has just taken place between my consciousness and the tree is called perception and it is a transaction that involves some communication between my consciousness and the existent which I call the tree. The plain man thought that relation to be immediate and one-sided,—that I just looked out and saw the tree while the tree did nothing. The facts of the expert show us, however, that the tree has an important part to perform. It must in the first place be an energizing thing and not the mere motionless mass it seems. Then it must set in motion vibrations of light or sound which are taken up and transmitted by the nerves to the point where my consciousness is affected by their stimulus. From this point of view it would seem as though the other existent did pretty much everything and that my consciousness were passive. This, however, is not the full case. The plain man has overlooked some facts in consciousness which now require to be stated. The great fact is the *initial act of attention* which attests the activity of consciousness. Then, again, there is the process of *reinstatement* by virtue of which a single light-stimulus enables the mind to bring up and put together a whole representation including many perceptual elements.

It would seem, then, that my perception is the result of concurrent activities and that it has a double history behind it. But I wish to know more about it. The perception itself, how is it related to the processes just pointed to and how is it related to the existents which are concerned

in its rise? To the processes it is manifestly related in different ways. It is the direct product of the conscious activity while it has been only indirectly stimulated by the activity outside of consciousness. That this is true will appear if we place an infant and an adult in the same relation to the tree. The adult's perception will be the developed symbol of a tree, while that of the child will be simply an indefinite blur with no special characteristics. But the objective stimulus is the same. Something must be allowed, of course, for the undeveloped condition of the nervous system of the child. But the main difference arises in consciousness. Perception arises as an act of attention upon a present stimulus, but this is only its initial character. It is for the most part a summation of experiences for which the objective stimulus has in a sense only supplied the *signal*. The child and the adult receive the same signal, substantially, but it signifies a thousand times more to the adult because he has had a thousandfold more experience than the child. We may say, then, that perception in view of the processes to which it is related is *simply the interpretation of signals from the world of existence, in terms of the symbols of a collective experience*. The perception as a whole is not produced or directly caused in any sense by the objective factors. It is directly produced by consciousness itself, though in the production consciousness has received a stimulus or signal from without which has served as the occasion of the interpretative process. When we study the process of perception as it actually arises and unfolds, we are impressed with the extremely mechanical and artificial character of the ordinary representations. If we were to rely on the judgment of the experts who approach it from the purely physical standpoint we would be led to the conclusion that consciousness has very little to do in the matter except to register in a passive way the results of brain transactions or transactions of the purely physical forces. On the other hand, the 'conscious' expert who has been accustomed to a too exclusive use of intro-

spection may find himself thrown into a state of panic by the monopolizing aspect of the physical claims. It is only, however, when the whole transaction is viewed on both its sides that it becomes apparent that the outside processes simply convey a hint to consciousness and that the whole business of organizing the perception-symbol is practically a function of consciousness.

What, then, is the relation of the concept-elements in cognition to those of perception? This will be the easier to determine in view of the conclusion we have reached as to perception. We have found that perception is an activity of consciousness which derives its occasion from a signal given by the existent outside of consciousness. This signal comes in the shape of a stimulus and is resolvable into certain wave-movements or vibrations which are traceable to this external existent as their source. What the transaction is in which consciousness first becomes cognizant of the stimulus, it is not given us to fathom. But we know the fact; the stimulus is apprehended as a signal and the perception-process is the interpretation of the signal, the organization of a symbol which will serve as a guide to conduct with reference to that particular existent. Now conception as a factor in cognition is a further extension as well as a transformation of the perception-process. Conception cannot be said to give us in any sense a first-hand construction of the world of stimulation. It presupposes the perception-object and it plays directly on this object. The stimulus of conception is the perception-object, not the original signal on which perception operates. Primarily, conception is an operation on perception. And in its meaning it is a further development of the symbolizing process which we call cognition. Perception gives us a world of things immediately qualified by our perceptions (for we have seen that the meaning of perception as a symbol does not arise to perception itself) through which they are represented as having a certain content of coloration, sonancy, roughness or smoothness, hardness or yieldingness,

coldness or warmness, sweetness or bitterness, agreeable or disagreeable smell, and so on. And they present themselves in certain more formal qualities as bulkiness by which they fill up our perspective more or less, and another quality by virtue of which they rebuff us when we attempt to ignore their existence; together with a third quality by virtue of which they abide through a series of perishable perceptions.

It is in these more formal elements of perception that conception finds its points of departure. This is a topic of some importance inasmuch as it is a denial that conceptual progress is primarily a matter of generalizing what Locke calls the secondary qualities. If it were this primarily, it would never reach the universal in cognition. But we know the universal is reached as a matter of fact. Science rests on principles which not simply *may* be, but *will* be, true throughout the world with which science deals. But we find that science can never go over the whole ground by observation to see whether its judgments are actually so or not. The truth of the matter is that observation does not work in the sphere of the real universal. The universal has a history, but it is not one of observation. It is a history of conceptual rather than perceptual activity. Conception first *extends* the world of cognition; then it *transforms* the whole. Here we are asking about the first function. In the first place, conception acts by taking a new start. We take a run in perception, then we draw back, as it were, to take breath, and in conception cognition is just getting its second wind and coming down to steady work. In doing so it seizes, instinctively no doubt, on the germs of the primary qualities which perception does not distinguish from the secondary. It develops the percept of bulkiness into extension. The percept of resistance is developed into solidity, which involves both reactive and persistive quality, the former supplying the norm of causation, which we have found to mean active, effective agency. Solidity in this aspect is a symbol of that active energy by

virtue of which causal effects are produced in ourselves or other agents with which we collide. Out of the persistive quality of solidity, on the other hand, combined with our experience of the ability of things to survive our perishable perceptions, the norm of *substance* develops. A thing comes to possess substantiality mainly through its power to hold the fort of its being and its activity against all comers. Lastly, out of the persistence of things through a series of perishable perceptions emerges the norm of time-succession, which is the form in and through which a plurality of changes maintains its connection with one center of existence.

We have gone far enough along this line to indicate the way in which conception develops the primary norms which are supplied in perception. It is the same world of existents with which both perception and conception are concerned. But conception extends as well as transforms the world of perception. It extends it, as we have seen, by developing the norms of primary quality found in perception. The development-process in conception is, however, *sui generis*. It proceeds, not by filling its net with mere particulars, but by reflectively developing the implicit character of the perceptive norms until their true significance is revealed. This significance of the norm consists in the fact that it is a true universal; that it is one of those forms which testify to their own universality in the world of cognition. Now, what do we mean by the term universality as applied to an element in cognition? What else but the fact that in what we call universal we have found a way of thinking about things that is co-extensive with the world to which the secondary qualities belong and which they characterize? The primary qualities are, in short, the *systemic* features of this world, and it is this systemic character which conception develops in the form of universality. The primary qualities are universal because they are systemic, and they are also necessary for the same reason. Only, here we approach the systemic principle on its negative side,

where it becomes apparent that if it be called in question the world of secondary qualities loses its foundations.

The concept-activity thus extends the world of perception by connecting it with certain principles or forms which organize its parts and elements into a system and thus complete it. But conception also *transforms* its world. The main step in the transformation is, of course, the change that is wrought by the development of *norms of universality*. This by itself, however, would be an abstraction, and we have seen that what conception works on immediately is the world of perception. We saw how perception develops its symbols through the various senses. It is difficult, however, to see how the world of secondary qualities could become anything more than a dog's world, without the process of reflection. The dog regards the symbols as the things themselves. At least he does not distinguish them from what they represent. But science begins with this distinction. Its phenomena are something more than they appear to be on their face. This something more is their symbolic character. Science distinguishes its phenomenon from the real existent which it symbolizes and it is regarded as an appearance or manifestation of a nature which underlies it and does not itself appear. All this is too erudite for the dog. The most intelligent dog could not become a scientist! But science, which is the organ of reflection, here makes an apparent diremption of the phenomenal from the real, only in the end to heal the breach by restoring the phenomenal to its place in the world of cognition as the symbol of a world of existents, that is, of underlying reality with which it is connected dynamically as an effect to its cause. The whole sphere of cognition thus becomes transformed. The secondary qualities become *real* phenomena instead of *quasi* things in themselves. The generalization of these leads science up to a point where the primary qualities become necessary in order to complete and rationalize the cognitive world. For we have been at pains to show in former chapters that the

mere generalization of phenomena constitutes but the preliminary work of science. The profounder and more characteristic task of science is the translation of its generalizations into laws by means of their connection through causation with a deeper world of reality. And the doctrine we are seeking to maintain here is that it is only by the mediation of the primary qualities that this translation can be effected. If there were none but secondary qualities, it is difficult to see how the transition from the dog's world could ever be made. But the primary qualities as they manifest themselves in perception supply norms to reflection by means of which the distinction between symbol and underlying nature, on which science rests, is achieved and by which also the whole field of phenomena is rationalized and completed.

We have seen how the two activities of perception and conception are necessary in order to complete the world of cognition. But the whole of cognition is a symbolizing process, and what it symbolizes is some world of existents deeper and more fundamental than itself. We have then come up to the question of the connection of cognition with the world cognized; and by cognized we now mean symbolized. In the order of the development of cognition itself it is clear that perception lies nearer than conception to its object; the first signal from the object is taken up and developed by perception, while conception develops from certain points in the perceptual symbol itself. Between the existent object which I call tree and my perceptions only three links can be traced: the extra-organic wave-movements, the intra-organic wave-movements, and the mysterious rise of the signal in consciousness; whereas, between the object and conceptions there are all these, *plus* perception itself. It is this that has led the empirical philosophers generally to ascribe more reality-value, at least more existence-value, to perception than to conception, and one whole part of our analysis here seems to bear in the same direction. But the force of this is overborne, I

think, by the fact that the empirical philosopher himself, in order to escape from the dog's world to the world of science, is compelled to reverse his presuppositions and to assume the greater reality-value of his conceptions. The fact is, that in ranking perception as a link in the chain, we have temporarily forgotten that it does not belong to the same order as the extra and intra-organic wave-movements. The perception including the conscious signal is a symbol developed by consciousness, which stands, not for the wave-movements of either species, but for the existent in which these have their rise. The symbol has no meaning for these wave-movements; it does not represent them in any way, and when their qualities are gotten at by some process of scientific analysis they are found to be wholly different from the symbols to which they give rise.

Let us bear this in mind, then, that perception symbolizes the existent rather than the process by which it is stimulated. On the side of consciousness we have seen that perception arises as a conscious interpretation of a signal which appears in the form of an original conscious awareness of a stimulation. There is no ascertainable reason in the signal why it should be interpreted in one way rather than in another. The infant without experience at all will not interpret it at all, although its attention will indicate a rudimentary impulse in that direction. The common element in all cases is the act of *attention*, which is an act of *will* rather than a cognitive act proper, but one that underlies all cognition. A *will-act*, as we have found, is an embodiment of the central and fundamental agency of consciousness which devotes its efforts to realization and to which the whole process of cognition is related, in the first instance, as an instrument. The symbolization of things is found in various ways to facilitate and make possible the greater extension and satisfaction of the practical energies. Perception as a whole, then, is, on its *objective* side an immediate symbol of objective existence, while on its *conscious* side it springs mediately out of an

act of volition. I have said mediately, because the attention acts immediately on the signal while the percept-symbol seems to be developed by activities which have been liberated in consciousness by this act of attention. *The percept-symbol is then a mediate result of an act of will.*

When we turn to conception, however, we find that the phenomenon presented is not the momentary acting of will which liberates an extra-volitional movement, but rather the *persistence of the will-act itself*. This is the peculiar quality of conception, that it is immediately related to the will. In conception the will takes possession of the conscious machinery and uses it as its hand-instrument in the production of its results. Thus the whole result of conception, its extension and transformation of the dog's world into the world of science, is related immediately to will and to volitional agency. In conception the relations of the symbol are transformed and cognition now represents only mediately the objective existent, while on its subjective side it is an immediate function of the activity of will. Here again we seem to be joining hands with subjective idealism which translates our cognitions into mere ideas of our minds. But the case is different with us. We have connected the cognition immediately with will, it is true, but this has not broken its mediate connection with objective existence. Berkeley was compelled to cut his perceptions loose from all objective reference in order to make good his position, but we insist on these connections as cardinal to our theory. Schopenhauer also was forced to practically the same measure in order to maintain the primacy of will and the volitional activity. Now, we are concerned here to maintain the primacy of will, but are not willing to pay Berkeley's or Schopenhauer's price. If we take cognition in its dual character as a synthesis of perception and conception, we shall find its product, so far forth as perceptual, directly related to the objective existent,—the tree in the case of the illustration,—while so far forth as it is conceptual it is immediately related to the activity of will.

Is there not something suggestive in this? Let us travel the road again from the real object which my cognition locates out in the campus and let us be on the alert that nothing essential escapes us. We have the extra-organic wave-movement giving rise to an intra-organic wave-movement, and this leading up to the first term in consciousness, the signal from which everything develops. We have traced the perception directly from this signal. But there is, in fact, a deflection here. What the signal appeals to directly is the *will* which responds in its momentary act of attention, an act which, of course, may repeat itself a great number of times. It is this act of attention that liberates the perceptive energies. But we have also learned that the conception-activity is an immediate result of the persistent movement of will in reflection. What we have not as yet noticed is *the connection between the momentary activity of will in perception and its persistent activity in reflection*. If we observe the process of reflection closely we shall find that it always follows on something that is present to the mind in some other form than that of reflection. The idea of God presents itself, and this starts a process of reflection. Now, in cognition it is clearly some product of perception that stimulates the conceptual activity. We are ready then for the last step in our analysis. The signal stimulates directly the will which acts in attention and liberates the perceptive-activities; these act in turn and develop the percept-object which again reacts upon will as a more elaborate signal and calls forth the persistent effort of will which we call continued attention or reflection. The liberation of the conceptual-activity is the result, and the outcome is the completion of the cognitive process.

In view of the situation as thus treated, are we not justified in concluding that cognition cannot be regarded simply as a link in a chain which connects it with the objective existent on the one hand and the will-activity in consciousness on the other? It bears, rather, a unique char-

acter. It is a symbol which stands between and represents two worlds. The original point of vital contact is the signal which is the first conscious awareness of the stimulation. But at this point it is important that we should distinguish the fundamental relation from that which is less fundamental. The course of direct influence is to be traced directly from the existent object to the signal, and from the signal to the will. The will asserts itself in the act of attention which liberates perception, and through the perception-signal is roused into a further and persistent activity which takes the form of reflection. Let us suppose, now, that the tree turns out to be an apple tree of which the fruit is ripe. The cognitive activity which has completed the symbol will then induce a further activity of will terminating on the original source of the stimulus and taking the form of plucking and eating the fruit. We have supposed the cycle to thus complete itself in order to make clear that the fundamental transaction takes the form of an interplay of energies between two existents, one of which at least is conscious, and that the cognition involved in this interplay develops as a symbol, the function of which is the mediation of the two species of agency involved. In has been claimed from the beginning that the cognitive activity is conditioned by a more fundamental agency of will, and it has been denied from the beginning that cognition and its object can be completely identified. The justification of this has now been brought forward in the discovery we have made that cognition is a mediating symbolizing process through which the agencies of the underlying world of reality are enabled to interact and through the development of which they are enabled to extend the sphere of their interactions.

CHAPTER V.

THE MENTAL AND PHYSICAL.

THE preceding chapter has brought us up to the problem of the two species of activity, that of consciousness and that of the physical world. The fact as it presents itself and as the plain man apprehends it, is one of two existents of different species in interaction, so that each can initiate processes that are completed, or at least continued, in the other. This will be apparent if we complete the cyclical transaction between consciousness and the tree. The tree initiates processes which lead to my cognition of it. But in turn, stimulated by the cognition, my will may initiate processes which lead to reactionary measures upon the tree, —plucking and eating its fruit or cutting it down for fuel. What the plain man realizes is the practical continuity of the two worlds and the ability of one to institute processes and produce effects in the other. Now we have seen that the plain man is to be relied on for the fact itself, but not for the interpretation of the fact. What cannot be denied is that the solidarity of the mental and the physical movements originating in either the physical or the mental realm, gives rise apparently without let or hindrance to processes in the other realm. There is this free interplay combined with the fact that no citizen of either realm ever crosses the boundary lines into the other. The transaction is clearly international, the process becoming physical on one side of the dividing line, mental on the other side.

The plain man interprets the relation as causal without troubling himself about inconsistencies. But science does not find the situation so easy. There is the poser to start with, as to how a physical movement can have a state or act of consciousness for its effect. The impossibility of making anything out of a supposition of this kind becomes clearer the longer we reflect. It was the hopelessness of the situation that caused science to give up the plain man's solution. Whatever the connection may be it cannot be causal, science thinks, and if not causal it cannot be a relation of interaction at all. Of this much science feels sure, but when the question arises, what then is the relation, all answers seem to lead into a morass. Rather than follow in this line we have decided here to venture a fresh analysis of the situation animated by the hope that some clue to a more rational result may be turned up. The analysis of the preceding chapter led up to one result which was, to say the least, disheartening. We found that the *nexus* between the nerve-movement and the signal in consciousness, by which we mean the first sensation that arises in connection with the stimulation, was one that could not be construed. In other words, how a physical movement or transaction can produce an effect in consciousness is unthinkable. The suggestion we have to offer here is that perhaps the trouble is self-made. We spoke of the cognition as a symbol which stood in different senses for two existents, the object which we call the tree and the volitional activity of consciousness. We then connected the objective existent with consciousness through certain wave-movements, extra- and intra-organic, and the supposition was that the point of meeting of the two existents was a transaction between consciousness and these wave-movements. But we are ready here to abjure this supposition, for when we consider the wave-movements we find that we only become aware of them through cognition. We have no immediate realization of them as we have of conscious activity, but making the objective stimulations which

arouse our conscious activities an object of investigation we develop a cognitive symbol of them in our representation of them as wave-movements. The wave-movement is thus symbolic like all other cognition, and when we ask what the nature of that which is symbolized may be, no answer is forthcoming. In short, the real nature of the stimulation by which the objective existent is able to affect consciousness is not revealed. We have its symbols in consciousness, according to which it is represented as a wave-movement, just as we have the symbol of the tree in consciousness by which it is represented as colored, extended and solid.

Now the difficulty of science has arisen mainly from the fact that the symbolic character of the wave-movements has been ignored and these have been treated as first-hand realities. And as consciousness is a first-hand reality, the transaction has been conceived as one between the wave-movements and consciousness, whereas now we know that it is between consciousness and what the wave-movements symbolize. This is important, for when we ask what it is these wave-movements symbolize we can only say that it is some kind of activity of the objective existent we call tree. Moreover, when we ask what kind of a being it is we call tree, we can only say that we have the symbol of it in consciousness but that this does not reveal its inner nature. We do not know the inner reality of the tree nor do we know the real nature of its way of making itself felt by other existents. When we come down to the bottom-fact there is only one kind of existent which we do know, and that is consciousness; there is only one way of producing effects known to us, and that is by the activity of our own will. These are our first-hand realities, our own consciousness and its volitional activity or agency. We have seen in another place how it becomes necessary to admit objective existents like the tree on the campus. But the tree is held inferentially, not immediately. We do not anywhere immediately realize its existence as we do that of

consciousness. But it is symbolized in cognition and its activity which we feel immediately only in sensation, as stimulation, is symbolized as wave-movement. What it is in itself we cannot say, only that it immediately stimulates consciousness in sensation.

It is a mistake, then, to imagine that the real terms of relation between the objective existent and consciousness are the wave-movements on the one hand and the volitional activities of consciousness on the other. The volitional movements are first-hand realities, while the wave-movements are only symbols. The first-hand reality here is the activity of the objective existent as it is in itself. But this is hidden from us. Let us call it the symbolized. Then the true statement of the connection will be that the activity of the objective existent, which is symbolized as wave-movement, arouses consciousness in sensation to volitional activity, one of the products of which is the development of a cognitive symbol of the existent which stands as the source of the stimulation. Thus in cognition the activities which stimulate consciousness are connected with their existent sources and the intercourse of the real world is mediated. But the transaction, as we now conceive it, is one that takes place between a conscious activity of which we know both the consciousness and the form of the activity, on the one side, and, on the other, an activity the nature of which we do not know, and which is conceived to be the function of an existent the nature of which we do not know. The situation as thus developed supplies us with two genuine metaphysical problems, (1) that of the nature of these unknown terms in our world, so far as this nature can be rendered intelligible, (2) the question of the ultimate connection between objective existents and the form of existence we know in consciousness, that is, the ultimate relation of consciousness to the world.

These metaphysical questions will have to rest for the present, however, while we attempt to reach some conclusion regarding the connection of the physical and mental that

will serve the purposes of science. In dealing with this connection between the physical and mental, science is interested in two forms in which it occurs. (1) The general case of the bond between the objective stimulus and the movement in consciousness to which it gives rise. This includes also the reverse process of a consciously initiated movement which is connected with processes in the physical world. (2) The more special case of the connection between the brain-movements and consciousness which is involved in cognition. The general case represents a physical process as in some way so bound up with a conscious process that the latter seems to carry out in consciousness a project which was started in the physical world. But for science the radical difference between the physical and mental processes,—in short, the unthinkability of their connection,—leads to the doctrine of a *parallelism* of two orders of movements which never intermix, but which so harmonize with one another that the one world may be depended on to carry out projects begun in the other. Thus if the wave-movements are those of a barking dog, the sensation in consciousness and the ensuing volitional movements may be depended on for an adjustment to the outer-situation in the world of consciousness. Now if science can succeed in separating its own problem here from the metaphysical considerations with which it is closely connected, a solution will no longer be hopeless. I say this in face of the almost disheartening disagreements into which the discussions of parallelism have led. The problem as it concerns science involves the fact as well as the scope and validity of this parallelism.

The question of fact seems to have been pretty well settled in the affirmative, while the extent and validity of its application are still in debate. There seems to exist no sufficient reason, however, for doubting that parallelism expresses a true law of correspondence between the physical and mental in the typical cases of volitional activities which begin or end in the physical world, or of brain-movements

and their corresponding sensations. Taking the first of these cases we may ask what the problem of science is in the case of volition-movements which have either their antecedents or consequents in the physical world. The classic passage in the discussion of this case is that of Hume, who denied the existence of any efficiency in volition to bring about physical effects. We are conscious of two things only, our own volition and the raising of the arm, but not of any relation of power between them. Hume is unanswerable on his own ground. But the plain man answers that it is not the *perception* of the arm-moving which he consciously connects with volition, but rather the *moving of the arm.* His experience would be stated as follows: "I am conscious of my arm moving in connection with my willing to move it. My perception of the movement is a different experience." It is evident, however, that neither Hume nor the plain man are keeping clear of metaphysical considerations. Science can only isolate its problem by recognizing the distinction between symbol and reality. The physical movements with which it deals are only symbols of an underlying reality that does not reveal its nature. But consciousness is not a symbol. It is a real nature, and its movements are real, not symbolic. This is the doctrine of consciousness which emerges here as the outcome of all the preceding investigation. The correspondence then arises between physical movements which stand as symbols of existents outside of consciousness, and the voluntary acts of consciousness which symbolize nothing but are identical with consciousness itself. The physical movements directly symbolize the extra-conscious activities. The question of science is whether these may be taken also as indirectly but reliably symbolizing the volitional movements of consciousness. May physical symbols be taken as indirect or mediate symbols of mind? If so, then these physical terms are so much more open to observation than their correspondents in consciousness, and they furthermore yield themselves so

much more readily to that exact treatment which science loves, that they may be taken by science as the physical equivalents of the conscious movements which they indirectly symbolize. We thus reach the fundamental plank of a psycho-physical creed. After the question of fact, which we may assume to be settled, the other question of science is one of validity, and we have now seen the ground on which the validity of the whole psycho-physical treatment of the connection between the physical and mental depends.

Let it be understood that the parallelism on which psycho-physics here rests is one of correspondence between physical movements which are symbols of real extra-conscious activities on the one hand, and the real volitional movements of consciousness on the other. In such a correspondence as this the question of causality or interaction could not arise. How could a physical symbol produce a real conscious movement? On the other hand, how could we conceive an act of will as directly producing a physical symbol? We are able thus to justify both Hume and the plain man while keeping the question of science free from metaphysical entanglements. The justification of the faith of science in its psycho-physical presumption arises out of two considerations: (1) that it is found to work as the basis of psychological method. This is the more empirical justification. (2) That the connection between the two orders is not liable to be broken. Wherever consciousness is found, there will also exist its connection with the physical.

Turning now to the more special case, that of the connection of the brain-activity with sensation, it must be admitted that the bond here seems closer than that between volition and its physical correspondents. Just in proportion to the success of the student of brain-psychology in defining and mapping out the brain-tract which is active in connection with sensation, does the minute correspondence between what Professor Strong calls the "brain-event"

and the sensation appear. I do not mean by this correspondence anything analogous to similarity. It is more analogous to the point to point correspondence of mathematics. For example, the volume of the sensation will correspond to the extent of the nerve-tract that is active, while the vividness of the sensation will have some relation to the intensity of the stimulus. Again, the configuration, position, distance and size of the object will have their corresponding properties in the movements of the nerves. It is needless to go on specifying. The correspondence here seems so perfect that it suggests a beautifully arranged pre-established harmony. But keeping the question of science isolated, there is no uncertainty here as to the fact of parallelism or as to the possibility of making it the basis of psycho-physical investigation. The only question is how the correspondence, as science deals with it, shall be construed. We saw in the case of volition that the terms compared were physical symbols and real movements of consciousness. Here, however, both terms of the relation are symbolic. The sensation-signal, as we saw, represented the starting-point of a double process. It stimulated the will to attention and it led to the development of cognition. Now, the whole of cognition which develops from the signal, symbolizes the extra-mental existent, the tree on the campus. But what the brain-movement symbolizes is the activity, the dynamic agency, of this extra-conscious existent. We have, then, two sets of symbols: one intra-conscious, representing the extra-conscious object; the other also intra-conscious, for these movements are perceptions, but representing the extra-conscious activity of these objective existents. Why should they not be parallel inasmuch as they both symbolize the same thing in different aspects; the one the existent as the bearer of certain secondary and primary qualities, the other the same existent as putting forth certain activities by means of which it brings about its recognition in the consciousness of another existent? We are not going into metaphysics here; we

are simply pointing out the fact that science is here dealing with *two sets of symbols which spring from a common origin.* This is the justification of its faith that the psycho-physical ground is here secure.

If we keep in mind the fact that in this psycho-physical parallelism between brain-event and mind-event science is dealing with two sets of movements which, as perceived, are two sets of symbols of the same thing (the objective existent in its more static aspect in which it stands as the source of a whole group of stimulations the symbols of which are combined in cognition; and this same objective existent in its dynamic function of stimulating consciousness by means of an activity which the wave-movements symbolize), it will be clear that the two sets of symbols ought to correspond inasmuch as the one set stands for the stimulus of the sensation, the signal which leads to the development of the complete cognition, while the other set is simply the cognition itself which directly represents the object. [1]We have, then, two sets of symbols which stand in the following relation; the one symbolizes an activity by which the objective existent stimulates consciousness to a present sensation; the other symbolizes the sum of activities from the same source which have given rise to sensations at any time and whose symbols are recalled in consciousness in connection with the present sensation. The present sensation is, therefore, a *genuine signal,* giving the hint to consciousness which proceeds in its work of reinstatement in accordance with its own laws. We have, then, a duality of symbols representing the same thing but in different aspects.

[1] It is vital here that we keep separate the brain-activity and our perception or conception of this activity, which is its symbol. The brain-activity is a summary of the activities of the objective existent, so far as they are involved in the present experience.

The two sets of symbols (1) of the existent as a static object, the present perception $\binom{a\ b}{c}$ (2) the symbols of the brain event developed in a separate cognition $\binom{x\ y}{z}$.

Formula $\binom{a\ b}{c}$ is parallel with $\binom{x\ y}{z}$.

Now it is clear in the light of this analysis that if we keep the question of science isolated no direct relation of causation or interaction can be supposed to exist between the two sets of terms. They are two sets of symbols which correspond but of which it would be folly to say that one set produces the other. When science realizes that it is dealing here with two sets of symbols and distinguishes symbol from reality, it will no longer trouble itself about the dynamics of the situation. The terms of its calculations will be a set of symbols external to consciousness and called physical. The justifying reason for taking the movements of one symbol as the equivalents of the other in a psycho-physical operation, will arise, then, primarily from the fact that the correspondence bears out the assumption that the variations of the mental symbol will have some calculable relation to the variations of the physical symbol. And the special reason for taking the physical symbol as the direct object of scrutiny is to be found, of course, in the fact that it is more accessible to experiment and more amenable to exact determination. Thus, if the problem were that of the reaction-time of various mental operations, we might experiment directly with the mental processes and get results which would, perhaps, roughly approximate to the truth. But their inaccuracy would render them unreliable. The experimenter's control of physical conditions, however, makes it possible for him to so manipulate them as to get results that are approximately exact and stable.

We have kept the question of science isolated in order, in the first place, to make clear what kind of terms enter into that parallelism of the physical and mental with which the psycho-physicist deals. The result has been the discovery that the terms of the relation are either a set of symbols related to a set of reals as in the correspondence of the physical and the volitional, or two sets of symbols related to a common source of reality. In neither case can the question of immediate dynamic connection legitimately arise.

But our second reason for isolating the question of science has been to bring out the fact that the answer to this question so far as it may be necessary to go in order to justify the procedure of science, does not lead to any very deep insight into the nature of things. It simply amounts to the discovery that the manipulation of physical symbols in certain conditions where the physical has a mental correspondent, and in accordance with certain approved methods, will lead to results which will also be significant for the mental. Our procedure does not tell us what either the mental or the physical is in itself. It leaves us, in fact, glaringly on the outside of the world, and, as I apprehend, does not come anywhere near to satisfying the deeper needs of science itself. What science would like to achieve is some insight into the nature of reality, and the source of this aspiration is, no doubt, to be found in the fact that one of the terms, at least, with which it deals is real. The world of science is a world for consciousness, and science is not long in finding out that the medium in terms of which all other things must be symbolically expressed if they are to be expressed at all, cannot itself be symbolic but must be the stuff of reality out of which symbolism is developed. Science becomes acquainted with one term of reality at least, that is, consciousness. But unfortunately it is just the term with which it feels least competent to deal directly. It can deal directly with the symbol and with the mental symbol, competently, only through its relation to the physical world. Here is certainly a kettle of fish. Science starts out to know its world and ends by playing with the shadows of the real while the real lies beyond its grasp and vision.

We are thus brought to the ultra-scientific problem of the metaphysics of the world of consciousness, the answer to which will involve two main considerations, (1) the deeper relation which the psycho-physical parallelism symbolizes, (2) the ultimate metaphysical construction to which consciousness leads. We have found that the isolation of

the question of science leads to a concept of the parallelism of the physical and the mental which excludes the supposition of the existence of any direct dynamic relation between them. But it does not exclude the supposition of an indirect or mediate dynamic connection. The parallelism exists, as we saw, either between two sets of movements, one of which is real, the other symbolic; or between two sets of symbols. Now while there can be no question of direct dynamic connection between a set of symbols and a set of reals, or between two sets of symbols, yet the suggestion of an indirect and mediate dynamic connection is not excluded. In truth the deeper instinct of science of which we have spoken and which science is not in this instance in a position to follow out, not only favors such a suggestion but emphasizes it. We have seen in other connections that science can only rationalize its results by connecting its generalizations with grounds that are deeper than its own phenomenal terms and which these symbolize. Perhaps we are dealing here with just one of those problems of grounding. But of this we shall be better able to judge later on. Let us consider first the problem presented by the voluntary activity. The whole situation may be represented as follows. Some objective existent, the tree on the campus, arouses in consciousness a sensation-signal which, when developed into cognitive symbols, presents to my consciousness a tree hanging full of ripe, luscious apples. This supplies a volition-stimulus, the result of which is that I will to stretch forth my hand and pluck some of the apples, and the outer movements involved in carrying out this resolve immediately follow. Here is a situation which involves the parallelism in both its forms, (1) between the physical and mental symbols in the cognition of the apple tree, (2) between the outer physical movements antecedent to and following the exercise of will, and the volition itself. Now, in the case of the two sets of symbols the parallelism suggests a relation of agency, but to suppose either set of symbols to exercise this agency is absurd. What, then, is

the value of our suggestion? Clearly, it leads us to connect the parallel relation with some deeper fact, and when we analyze the suggestion itself and find that it is logical rather than psychological, and that it has wrapped up in it the refusal of the scientific mind to accept the parallelism as an ultimate fact, we begin to have an insight into the real issue. The suggestion of a deeper relation is the form which the scientific demand for a grounding of its phenomena here takes. We may then consider what is involved in this demand for grounding. We have seen that it means in general the relating of phenomena as symbols to underlying substances or forces. Now we have seen that the phenomena here are symbols of existence, and in the last analysis, of activities, that is, of active agency. The developed cognition is a symbol of the tree as an object, but its elements are all symbols of activities. Hence the objective existent is resolvable, in the last analysis, into a persistent center or subject of dynamic activities. And these activities are what is really symbolized in both sets of symbols. We have, then, as a net result of our study so far, the conclusion that the parallelism is a relation between two sets of phenomena which have a common dynamic connection with a deeper ground.

But we have not as yet come in sight of the real connection between the mental and the physical. Let us pass on to other elements of the situation. We have followed the cycle from the objective existent to the cognition and have seen how the parallelism points to a deeper connection. But the cognition itself is responsible for the beginning of another process. The cognition of the apples arouses desire, let us say, and this desire stimulates the will to resolve to reach out the arm and appropriate some of the apples. Here our symbol seems to have power to produce effects. But we must bear in mind now that we are dealing with consciousness and that consciousness stands to us as a real activity and the only one, in fact, which we know. We have seen that the activity of consciousness

develops a symbol which has cognitive value as representing the objective existent. But its cognitive value may not be its only value. It will be a symbol in as many respects as it has distinct values. It is a cognitive symbol because it has cognitive value. But it has also value for desire or feeling. It not only represents an object to consciousness, but it represents the *desirable* to feeling. The representation of the luscious fruit is thus a symbol of the desirable. The satisfaction of feeling in the form of desire is, therefore, the real which the luscious apples symbolize. There is no other primary incitement of will, in this field, than the desirable or its opposite, and the cognition is also the symbol of the desirable. As such it stimulates the will. The *desire-satisfaction* is thus the primary sensation,—the signal which consciousness in the form of will translates into terms of active agency. The developed volitional experience (the resolve to stretch out the arm and the rest) stand in consciousness as the practical counterpart of the developed cognition on the theoretic side.

But we have not entered as yet into the full meaning of the whole experience. Superficially, we connect the act of will with the outer movements of the arm by which the fruit is grasped. But we have now learned that these outer movements are symbols, and the question here is, what do they symbolize? The answer is that they symbolize those activities of the extra-conscious world which are called physical but whose real nature is hidden from us. The movements of the physical world are open to observation. But they are perception-symbols of energies or forces which are not representable and whose nature we are, therefore, not in a position to determine. But these underlying forces are the terms with which our will-activity is really connected. We consciously will to reach forth and seize the fruit. We are conscious of the movements of our muscles by means of which this resolve is outwardly carried into execution. But this second consciousness is not an effect or even a continuation of the conscious will-

act. This consciousness develops a cognitive symbol of the real transaction, a perception of the physical movements by which the real activity is symbolized. The will-consciousness does not continue on up to the object of its resolve, and yet its resolve is realized. We have here a very strange situation and yet one that is perfectly analogous, though in a reverse direction, to the one which arises in connection with the original sensation or signal. We saw in that case how a movement in consciousness was initiated for which we could find only physical antecedents. And while our subsequent analysis led us to deny any causal connection between the two sets of symbols which arise, we could not deny some sort of a dynamic connection between the underlying activities which were thus symbolized, and the sensation-signal that arose in consciousness. Here in volition we have the relation reversed. While we are led to deny a dynamic connection between the will-activity and the movements of the muscles, it is not open to us to make such a denial in view of the connection of will-activity with the underlying forces of which the physical movements are the symbols. There are thus two points of connection, and they are the vital ones for our problem, in regard to which science can say nothing except that there are real bonds and that being connections between dynamic agencies, they are doubtless themselves dynamic. The possibility of the connection is demonstrated in its actuality, and its dynamic character follows inferentially from the dynamic system to which it belongs.

What we are cut off from assuming here is that the reality which underlies the physical and the reality we know in consciousness as exercising real agency, are so radically different in nature that activities arising in one sphere of reality may not be propagated on into the other sphere and there realize appropriate results. All experience goes to show that at bottom this is the kind of a world we live in. But this does not enable us to go very far in the way of real insight into the nature of things. Science can only

say in the light of this deeper insight that its symbols bind it over to a doctrine of the world which connects them with underlying realities. We only know the reality of consciousness. What the reality underlying the physical is we do not know. But the fact of the propagation of activities from one realm to the other enjoins us from supposing that the difference of nature between these two species of reality is more than relative.

We come, then, to the final metaphysical question as to the ultimate construction which consciousness leads us to put upon the world. It has appeared that science is unable to put any final interpretation on the terms with which it deals. Its deeper insight leads it to recognize realities underlying phenomena. But it has no available insight that enables it to reach any positive conclusion about these realities. True, science finds itself enjoined from thinking the difference between consciousness and the real underlying the physical to be more than relative. And it has consciousness like an open book from which it might be supposed that it could obtain some valuable clues. But from the full use of what it finds in consciousness, it is enjoined by the kind of results for which its method binds it over to seek. The method of science must always be mechanical in the sense that its results must come finally under the law of natural causation. Again, science is further limited by the demand that its results shall be definable up to a standard of exactness which can only be attained where its data are as open to experimental manipulation as are the facts of common observation. This standpoint can be attained only in the sphere of the purely physical or in that of the possible correlation of the mental with the physical. Even when the facts of consciousness seem to lie open, science finds that it cannot go very far by the use of pure introspection alone. After the first greetings of the facts of consciousness which we can obtain in no other way than by introspection, science finds that it must make its point

of view more and more objective and that it can proceed with full assurance only when it is seeking to determine the mental through the medium of its physical correspondent.

In the very nature of the case, then, it is not to be expected that natural science would be able, without forswearing its most characteristic methods, to make a use of consciousness which gives the primacy to introspection. This, however, is precisely what metaphysics proposes, and it derives some assurance here from the fact that science does not deny all value to introspection. It only denies the adequacy of the introspective method for the kind of results it is seeking to reach. The question whether the method may be valid for attaining other results for which science does not seek, is left open. The result of the foregoing analysis has brought out the fact that there are just such results as these. Science in its profounder insight realizes a world of realities whose nature and relations it regards as problems that lie beyond its determination. But it does not deny the reality of the problems and it does not deny the possibility of any determination. The field is closed to science by virtue of its mechanical methods and aims. But the question is left open whether an investigation which proceeds by other methods and aims than those of science may not be able to reach results which, though not possessing the precise kind of value science requires in its results, may yet possess a different species of value of a very high order.

There is thus not only an open field for the metaphysical investigation, but its problems are cut out for it, and the tailor that has done the cutting is science itself. The immediate question which science hands over is that of the nature of the dynamic connection between consciousness and the real which underlies the physical symbols. But the solution of this question depends on a deeper question: what conception can we reach of the nature of that which underlies the physical? If no conclusions of

any value are attainable here, then it will be found that the question of science will also be unanswerable. Now, if we call consciousness a, and the real which underlies the physical x, and let the sign of equality stand for the fact of reciprocal influence, we have the symbol $a=x$. Of this symbol one of the terms, a, is known, the other, x, is known to exist, but its nature is unknown; the same is true of $=$, the reciprocal influence is known to exist, but its nature is not yet determined. And we have found already that the question of the nature of $=$ must be laid on the table until that of the nature of x has been taken up and settled. Now, we have already asked and affirmatively answered the question whether there are certitudes outside of those of science. We have also similarly treated the questions of starting-points and methods. Theoretically, there are possible starting-points, methods and certitudes which possess a value of their own outside of the species to which science rightfully pins its faith, as science. But even science will endorse a procedure which starts with the known and attempts from it to determine the less known and the unknown. Taking our symbol then, $a=x$, we find that the only known term is a, while only the existence of the other terms is known. A method that would hope to reach any valuable results will start, therefore, with and from consciousness. But our earlier analysis, which has only been confirmed by later explanations, has brought to light the fact that the essential reality of consciousness is that of self-agency, which realizes itself through the media of idea, purpose and end. In other words, we have found the essential reality of consciousness to consist in an agency that is formally an activity of self, and finally, teleological and end-seeking. And to this whole species of agency we have applied the term purposive to distinguish it from agency of the mechanical species from which the purposive is eliminated. Let us set up the hypothesis, then, that the unknown x is a reality of the same species as consciousness. Then by hypothesis x, being the same in nature

as *a*, its agency,—that is, its method of getting results,—will be the same, or at least of the same species. When we have determined conscious activity as purposive in its form, we have secured a premise from which the inference follows that the agency of *x* will be of the *a* species. This does not carry with it the conclusion, however, that the agency of *x* will be a fully developed purposive agency. We have the whole history of consciousness pointing to the fact that the developed agency of the higher consciousness exists only in germ in the lower forms. But what our hypothesis leads to is the inference that the species of agency is the same as that of conscious agency, whether we represent it in its germinal or its more developed forms. Our inference rests on the broad fact that consciousness has one generic way of doing things, whether it be found in a jelly-fish or a philosopher. If, then, we apply our hypothesis in a way which our knowledge of consciousness will bear out, the conclusion to which we are led is that *x* possesses a nature of the same species as *a*, and that its agency is, therefore, analogous.

But then this is only hypothetical, and, you may say, "gratuitous." That is true, but we have only used the hypothesis up to this point in order to ascertain what results would follow from it. Let us consider, now, what can be said for the hypothesis. In the first place, it is clear that if this hypothesis be untenable there is no other supposition that can take its place. If we cannot use the analogies of *a* to determine *x*, then *x* must remain forever unknown. But, secondly, the *fact* of the mutual influence of *a* and *x* carries with it the presumption of a *common nature*. That natures wholly different should intercommune is wholly unthinkable. The basis of intercommunion must be sameness of nature. The fact of = carries with it the conclusion that *a* and *x* are in some respects the same, while the fact that there is no let or hindrance in this fellowship carries the presumption that the community of nature is essential and not superficial or accidental. How shall this community of nature be deter-

mined? Here again the method which determines the common nature from the analogies of consciousness has in its favor the fact that it is a procedure from the known to the unknown. Either that or the common nature must remain forever unknown. Thirdly, there is no alternative to the method of explanation by using the analogies of consciousness. The original transactions which led us to assert extra-conscious existents, were transactions within consciousness. We never get any first-hand knowledge of these existents. We only assert them because, in the last analysis, it would be absurd to deny them, and neither science nor philosophy can tolerate the absurd. We know only one nature, and that is consciousness. But there are extra-conscious existents which objectively condition our cognitions and rebuff our volitional efforts. What is the nature of these existents? We cannot tell unless we see our way clear to the conclusion that they have something fundamentally in common with consciousness. Aside from other considerations which bear us out in saying this, there is the consideration that the transactions which lead to our assertion of the existence of these objects are transactions in the world of consciousness. But in the fourth place, the very form in which the case is transcribed from the docket of science contains a measure of implication. Why does not science abide by the bare parallelism which supplies the situation needed for the getting of scientific results? We have seen that the deeper insight of science will not rest satisfied with this. Why not? Partly because science cannot rest satisfied in a world of symbols, but demands something deeper. Partly also because it cannot be that a system of coincidences which work out so harmoniously has no reason for existing except the fact that so it turns out to be. The force of these considerations leads science to propound the metaphysical problem. But these considerations are all demands which consciousness makes upon itself. Why should there be anything deeper than phenomena, or more profound than the parallelism of the

two orders? Simply because consciousness in its organ of reason will not have it so. A world which ended here would be a scandal to reason.

When we combine these considerations with the general argument for the metaphysical interpretation developed in these discussions as a whole, going to show that the completion of a world-theory everywhere involves a synthesis of the concepts and methods of natural science and metaphysics, I think we have reasonable grounds for regarding our hypothesis as something more than a mere supposition. It is a supposition which is everywhere borne out by a reflection that aims to be complete, and it is a hypothesis of such a nature that its denial leaves a vacuum of unintelligibility at the heart of the world as it also leaves the last results of science without any rational justification.

The World of Existents.

A hypothesis, the opposite of which is absurd, may not possess the kind of certitude at which science aims in its results. But it possesses a kind which science presupposes in its faith in the reality of the world with which it deals, and to which it points in the deeper insights that convince it of the reality of problems which lie beyond the field of its own solutions. Our analysis has led us to a point where we see that consciousness must itself absorb the whole of reality or itself become a pure illusion. The alternative of illusion is, of course, open, but let him who takes it bid farewell to all reality. Consciousness is the stuff out of which all other world-substance is, in the end, manufactured.[1] If it be illusion, then illusion is absolutely universal. The alternatives here are still the reality of consciousness or the universality of illusion. In taking sides with consciousness we simply take the only way open to us of escaping from universal illusion. But in taking sides with consciousness we identify ourselves with consciousness. There are not consciousness and ourselves, but

[1] See Appendix B.

just consciousness, and we are its organs. We are thus committed to the whole claim of consciousness, and we have seen that this is nothing less than the whole of reality. Why, indeed, should it be otherwise? We have seen that all the processes everywhere which have led to the assertion of any kind of existence have been transactions in consciousness. Even the colliding of two billiard balls is a transaction in consciousness, since it comes to us in terms of conscious apprehension and is symbolized under physical analogies. From the subjective point of view of the cognizing consciousness, it is impossible to affirm anything but the transaction in consciousness. It is only because this transaction itself would be thereby reduced to absurdity that we are forced to assert objective existents outside of the cognizing consciousness. But we have been over this road and do not need to travel it again. This being the case, we naturally expect consciousness to claim the primacy in a world which itself has constituted. And when the question of the nature of the existents which stand outside and objectively condition the physical symbols, comes up, the claim of consciousness to be allowed to supply the norms of definition from the analogies of its own nature is both natural and logical; natural as no one will dispute, and logical because it has been the requirement of consciousness itself that has led us to assert these existents and there are no other analogies which could be used for definition.

The nature of objective existents must, then, be determined after the analogies of consciousness. But there are no analogies available except those of its deeper agency. The analogies of cognition are applicable only to the world of symbols inasmuch as cognition expresses itself in symbols. Now, we cannot say that these objective existents exercise cognition. They may, but there are no data here to turn our hypothesis into necessity. The analogies we must use are those of volitional activity and that central agency by which consciousness goes out dynamically in its

effort to overcome and realize the world. Now, in connection with these activities we cannot exclude a certain cognitive quality. Will is not absolutely separable from idea, and even in its lowest and simplest movements we find that consciousness acts with some degree of intelligence. Its mere touch is anticipatory and the principle of selectiveness and end-seeking is rooted in its primary quality as consciousness. It is here that the true point of departure is found for the application of the conscious analogies. We have seen that the intercommunion of consciousness and the objective existents carries with it an essential community of nature. We have to add to that conclusion one that we are led up to here, namely, that this community of nature, when reduced to the lowest terms possible, will doubtless involve the ascription of the lowest form of conscious activity to these objective existents. Let us call this stage that of simple feeling-susceptibility,—a stage in which an impulse arises as an immediate reaction upon a stimulation and begets an immediate forward movement of some kind. We have no other means of determining what more than this, in the way of initiative, the objective existent may be assumed to possess. We here strike a minimum below which it will not be possible to go.

Genetic psychology is teaching us that the tendency of consciousness in the child is to ascribe the maximum rather than the minimum; that its whole world is at first a social community whose objects are all other selves. The child's experience, however, of the different modes of reaction of different objects leads it gradually to strip off some of the conscious properties from some of its objects until at length it reaches a fundamental distinction between the inanimate and the animate, the latter being assumed to act consciously. Now, the genetic fact is not without interest, but our problem here is critical rather than genetic. How are we to make a critical use of conscious analogies in determining the nature of objective existents? The answer to this question will lead to a method which is the reversal

of the genetic. We begin with the necessary minimum, and this determines for us the lowest type of existence. The physical object, if by it we mean the existent which has its symbols in cognition and in the physical movements, will be one that is reducible to a form of agency which involves at least the bare rudiment of feeling-susceptibility. That is the lowest term on which an objective existent could get itself recognized: otherwise it would be resolvable into a bunch of phenomena without any substantial center of activity. Let us endeavor to see, then, how this necessary minimum enables us to realize objective existents. A world of objective existence is, of course, a world of plurality, for there are at least the consciousness which knows and the existent that is known. But we do not need to limit the plurality. Let us suppose that the things of our own world represent an indefinite plurality. We shall then have a system of real existents in relations of intercommunion. Now we have seen how we are led to ascribe the necessary minimum of conscious agency to each of these existents. Here the necessity indicates itself in another way. We have the problem of intercommunion itself on our hands. How can this be effected? Let us suppose a movement of some kind as originating in the nature of some existent. If we call this existent *c*, how is the movement to be communicated to *d*? It is impossible to conceive the activity, whatever it may be, as passing out of *c* into *d*, for in the first place how could it get across to *d*? We are obliged to drop the physical analogy in order to get rid of the impassable gulf between the two existents. We can only suppose that the movement is of the form of a conscious activity; that it is some sort of a feeling for *d*, and that the chasm does not exist to it, but that the impulse of *c* is able directly to beget in *d* a feeling of response, and that thus the intercommunion is effected. This is at least an intelligible transaction, and it explains what physics could never explain, the real fact which is veiled under the symbol of transmission. Nothing

is transmitted, *c* keeps its feeling-impulse and *d* does not part with his. But we may suppose the transaction as going on indefinitely. On the face of it and under the veil of transmission, which is a physical symbol, the movement has, so to speak, passed from *c* to *d* and so on to *n*, and all the energy has been conserved. But in reality there has been no transmission, and energy has been conserved only in the sense that each term keeps its own energy while it is able to induce a corresponding activity in the existent that is its neighbor.

Now let us apply to the mode of agency which is embodied in feeling-susceptibility, the term *spontaneity*. Spontaneity will then stand for this spring of initiative in each existent. A purely physical object then, a mountain or a stone, will be one that is either not a real existent but a mere bunch of phenomena, or it will be an existent in which this principle of spontaneity is at its lowest terms. This is intelligible in view of the fact that we find some forms of instinct in which intelligence is at its lowest terms. Spontaneity will be at its lowest terms when it is so hidden in the mechanism of movement as to be completely latent; that is, *indiscernible in the movement to which it gives rise.* The phenomenon or symbol of spontaneity in that stage will be the movements which we call physical. If we suppose the spontaneity to become more explicit we shall have a gradual modification in the form of the symbolic movement that arises; first in the plant where a germ of selectiveness appears, though without consciousness in any explicit form; then in the animal where consciousness becomes explicit and the form of movement changes accordingly. We have thus only to suppose a gradual development of the spontaneity of the underlying nature, in order to discover the ground of the distinctions which arise between inorganic and organic and between different stages of the organic itself, in the sphere of phenomena.

This opens the way for a last word about the two orders. We have seen that the parallelism is not final but points to

a dynamic connection of *reals* deeper than itself. We have now traced this dynamic connection and found it to be real. But it is not an intercommunion between two different orders of reality, which would be impossible. There is in the last analysis only one order of reality, the order of consciousness. But conscious reality may be in different stages, as we have seen. What we call the physical existent turns out, on analysis, to be only a conscious real at the lowest level of its existence. Here it is a spontaneity which is so latent as not to reveal itself in the form of the movements to which it gives rise. The lower organic is a higher stage where spontaneity becomes to some extent explicit in a kind of selectiveness, but as yet below consciously determined movement. If we put these two subconscious stages together and call them physical, the stages above this will represent the superphysical order of consciousness proper. We shall thus have the two orders of movements, the physical and the superphysical, but these orders will not point back to two orders of reality; rather, to one order in different stages of development. If it be asked how this affects the question of the reality of the physical world, I would answer that it leaves this reality untouched to everyone but the dogmatic materialist. If he is going to insist that the very last things in reality are hard, 'uncutable' pieces of matter and that these constitute the veritable tortoise on which the world rests, then I suppose the rest of the world will have to be left to perish in its sins. But what physics requires is an adequate grounding of the species of movement which forms its staple. We have seen how the foregoing analysis not only spares this movement but grounds it by showing for the first time, perhaps, how it is possible. Consciousness begins by apparently tearing down the labored structures of science and common sense, but having asserted its prerogative it becomes a restorer and shows us how everything of value has not only been conserved but grounded more securely in the nature of things.

CHAPTER VI.

SOCIAL ACTIVITIES.

A. *The Social Individual.*

A DISCUSSION of the social activities of conscious beings will involve two somewhat distinct, nevertheless closely related, topics, (1) The social individual, its rise and development; (2) The social community, its basis and evolution. That the social community is composed of social units, and is, from one point of view, simply an aggregate of these and their activities, is obvious; what more than this it may be will be a subject for future determination. But before entering on the discussion of the social community, it is clearly necessary that something should be known about the social units of which it is composed. Our doctrine here is that the first chapter in social community must be psychological and that the student of social phenomena can only hope to build successfully provided he seek a psychological foundation for his facts.

We consider here, (1) the rise, (2) the development of the social individual. As a starting-point for a doctrine of the social individual, let us refer back to some of the results of the last chapter. The conclusion was there reached that all existence is of one species, fundamentally, and that the distinctions which arise are all relative rather than absolute. The common property or endowment of existents which conditioned their intercommunion was found to be spontaneity or feeling-susceptibility, and we saw also that

the distinctions in the character of phenomena which mark off the purely physical from the organic, and the lower organic from the higher in which consciousness has become explicit, arise in connection with the successive stages in the development from mere spontaneity, its lowest stage, where it manifests none of the ordinary phenomena of consciousness excepting its initiative, to the highest where consciousness has become reflective. We do not need to contend here that the social is a function of mere spontaneity. The only question open is one regarding the point or stage in the development of spontaneity at which it becomes distinctively social. Now while the impropriety of conceiving purely physical activities under social categories will be admitted, there may be less unanimity in regard to the lower organic. The phenomenon of intercommunion is universal and the plant manifests it in common with the animal. The plant displays also a selectiveness that indicates, in a sense, a will of its own. But whether this selectiveness be wholly unconscious, or accompanied by some rudimentary kind of consciousness, is not directly open to determination. Notwithstanding the fact, then, that ordinarily, consciousness is excluded from the life of the plant, we shall be justified, I think, in regarding the question as one that is debatable but perhaps not open to final solution.

We reach ground that is not debatable when we enter the sphere of animal life. Here it is known that consciousness in the form of sensation and, therefore, of feeling-susceptibility, has become explicit; that, in short, the animal is not only moved by feeling-impulse, but that it also feels this movement *in itself*. We may fix, then, as the minimum limit or lowest level of the social, the point where the animal first becomes aware of its feeling-impulse as a movement in itself. Whenever a being has become the conscious subject and bearer of feeling-impulse, it has then qualified in the class of socials whether it has actually become social or not.

What essential form, then, will the social activity assume? One thing is clear, that while social activity involves cognition in various ways it is not distinctively cognitive. It would be folly to identify sociality with knowledge. Referring back to the illustration of the tree, the social is not to be identified with the cognitive activity that develops the representation of the tree laden with luscious apples, but rather with that aroused by the desirable quality of this fruit. In short, the social is a practical activity with a practical end in view, and we may designate consciousness in relation to its social activities as the practical self or will. The social self is a consciousness in which the activity of will is central. It is feeling-impulse raised to some degree of conscious intensity.

But we have as yet only determined the genus of the social activity as a practical function of will. Consciousness, in the exercise of its central agency, becomes the subject of social experience. This will perhaps be admitted by everyone without debate. But the social experience itself: What is it and why is it called social? We shall enter more fully into this in the next chapter. Here it will be sufficient to determine two things: (1) That there is involved in the social situation other existents besides the subject of the social experience. One isolated being could not be a *socius*. The subject of the social experience must have its other existent with which it interacts. (2) This other must be socially *interesting* or *desirable* in some way before it can have the power to arouse social activity. What is it, then, to be socially interesting or desirable? It would be moving in a circle to reply that to be socially interesting or desirable is to be capable of satisfying some social want or demand. Yet perhaps such an answer would help to define the issue. We can perhaps strike in the neighborhood of the truth in the general statement that every thing desires its own *kind*. This will bear criticism, I think, if we confine our subject to conscious things. Every conscious being desires its own kind, and this, no

doubt, primarily because it derives a species of satisfaction from having itself thus doubled, that could be attained in no other way. Now we may reduce the terms of the relation, thus characterized, down to the minimum limit. So long as it remains true that one being derives this unique kind of satisfaction from the presence of its objective other, the situation will be genuinely social.

Let us assume this as the primary fact of sociality. The problem we have set for the remainder of this chapter is one that is almost purely psychological: namely, how does the individual unit arrive at the realization of itself as being also a social unit? Or, to put the question differently, how does the individual self come to know itself as a social rather than as an isolated self? Our question is, then, mainly one of knowledge and conscious realization rather than a question of the forms of social activity. We ask how the self comes into the possession of those elements of social consciousness which constitute it a *socius* rather than an isolated self? And in answering this our appeal will be to the experience of which we know most, that of the child and the man.

How then, we ask, is the consciousness of self as a *socius* achieved? In the first place, it is clear that we shall have to deny the validity of an older point of view in which the self was conceived as standing apart from its social relationships and as viewing these as external to its own proper interests and activities. On this point the old psychology can derive little support from the ordinary consciousness of the plain man to which its appeal was so commonly made; for the plain man's self is one that includes all his possessions, so that even an insult to his dog is taken as an indignity to himself. The real self is the concrete self of the social relations; the self that can say "nothing that touches any of my possessions can be indifferent to me." [1]It is the business of the new psychology

[1] The passage from here to the end of the first paragraph on page 280 of this work is taken, with a few verbal changes,

to show the validity of this by exhibiting either *analytically*, that the stripping off of the social relations leaves a mutilated ego and, when carried far enough, nothing that is definable; or, *genetically*, that it is one and the same consciousness and life-history in which are developed the realization of the individual self and that of the social other, and that the distinction between the two is *intra* rather than *ultra* to the real self. What, then, do we mean by the self as a *socius*, and how is the idea of the *socius* to be scientifically grounded? The answer will involve an investigation in two parts, the first dealing analytically, the second genetically, with the problem. In the first place, then, we may ask for an analytic answer to the question we have proposed. Let us take as our point of departure the consciousness of an adult, say that of an intelligent man who is at the same time innocent of psychology and not much given to self-reflection. Take, for example, the ordinary man of business and society whose life is absorbed in outer activities, and let our analysis proceed from the standpoint of his own conscious relation to his activities rather than from the aloofness of a mere spectator. His world will be represented, in fact, as one in which his own aggressive and organizing agency stands central and to which every part of it will be related. Let such a man begin to inspect his own conscious processes; or, what would be still better, let someone who is trained in this species of analysis enter into his point of view as far as may be possible, and perform the work of analysis in his behalf. If the man be primarily a man of business and only in a secondary sense a votary of society, it will be found that the standpoint from which he is most accustomed to consider himself and the issues of his life is that of his business relations, and that proceeding out from these he develops a conscious representation of himself as so bound up with a community of other selves of the same type, and

from an article of the writer's on *The Social Individual* published in the *Psychological Review*.

whose point of view is identical with his own, as to give rise to a whole system of responses in the form of demands and obligations. This system of responses will constitute what is most real in his life, and were he to attempt to form any construct of himself as he would be apart from these vital relations of the business world, he would either find the enterprise impossible, or the self he would achieve would be hypothetical rather than real. The real self is the self of vital interests, and apart from this there can be no real self. The only resource open to the man in question, if he be not satisfied with his business self, is to transfer his vital interests to some other world. Let this be the world of society. Here it will be found that the same drama repeats itself; his vital responses take on the society order, and when he attempts to dissociate himself from his society relations the self that remains is mutilated and to a great degree divested of reality. This analysis may be carried through the whole sphere of his social relationships so as to include the domestic, civic and religious, and the same conclusions will be found to hold true. The self-consciousness of the family man is that of the individual clothed with a specification, so that the real self is now father, husband or son, and this specification thus modifies and determines the basis of all his conscious responses and consequently the whole sphere of his conscious responsibilities, privileges and enjoyments. Again, the civic consciousness, by virtue of which he becomes a citizen, a patriot and a member of a political party, is the bearer of a still further specification of the central self. The citizen-consciousness is that of the conscious self specified and defined in the direction of the civic interests and relationships, and thus becoming the bearer of a larger complex of duties, privileges, responsibilities, rights and enjoyments. Lastly, his religious consciousness, by virtue of which he becomes a worshiper of God, is a still further specification in view of his sense of unique relation to a being that transcends him. The result is a self defined and

specified in this particular direction, and responding concretely to a system of motives that are distinctively religious; in short, a self that is not real apart from its religious relations.

We have only to follow out this analysis into every detail of life in order to reach the conviction that the self which is central in all these activities, and which we may, therefore, call the *cardinal self,* is not in any sense independent of its social relations, or in any sense complete without them. The social relations constitute, in fact, the modes by which the self passes from the stage of indeterminateness, where it only vaguely realizes itself, to that of more complete specification and definiteness, through which it becomes more completely self-realized. The *socius* is, therefore, the more fully defined and realized self. William James, in his very suggestive chapter on *The Consciousness of Self,* in the second volume of his *Psychology,* gives an exhibition of this analytic method[1] and shows how the self achieves the various and successive stages of its definition in terms of the social medium. He represents these several stages as so many selves, and maintains that a man has a plurality of selves, each of which has its own characteristic ways of reacting upon its world. This may be accepted as a striking and, on the whole, appropriate way of stating the case, provided we do not go to the extreme which James himself avoids, and assert that these selves are not only distinguishable, but also separable. Our doctrine will lose coherence if we do not hold in connection with it that it is the same cardinal self that is central and continuous in all this variation of form, and that the process as a whole is to be taken as the mode in which this cardinal self attains to definite and concrete self-consciousness.

Passing now to the second method of dealing with the social aspect of the self, the *genetic,* we find important

[1] Psychology, Vol. I., Chapter X. The Consciousness of Self. This chapter has marked an epoch in the recent psychology of Self.

illustrations of it in the work which is being done in the field of genetic psychology. The general aim of genetic psychology is, of course, to discover and formulate the stages and conditions of the development of consciousness. But a special department of the science has arisen of late in response to a pressing demand for a more adequate treatment of the psychological aspects of the social consciousness. The result has been a group of works which have had for their aim the genetic study of the social individual or self. Taking the work of Baldwin as developed in his *Social and Ethical Interpretations* as embodying the common aim of these works, we may found on it the following representation. The problem of this branch of the genetic enterprise is to show how the social consciousness may be brought under the rubrics of psychological evolution so as to give a demonstration of the solidarity of the social with the consciousness of the individual self. And this aim is achieved by showing in detail how the self in coming to its own clear and definite self-apprehension is brought by the same process to a recognition of its social other. The investigations we have in mind posit, by implication at least, a germinal self, or at least a consciousness of the self-type, as the inner individual center of response, and the object is to exhibit the method and the environmental forces which lead this germinal self-consciousness through the progressive stages of a development in which the social becomes a corporate part of the very self. Now what is needed in order that this aim may be effected and the development be seen to be real is to determine, (1) what is meant by *social environment and heredity,* (2) the characteristic form of reaction in this field, and (3) the kind of definition or specification which the self obtains as a result. In short, the categories of the evolution must be defined with reference to the kind of material in which they are supposed to work.

Now it is not difficult to determine the nature of the social environment. If we consider the self as a social

unit in a system of interacting units, it will be clear that the environment is simply the social medium in which the organism exists and performs its functions, and that this medium not only includes the social individuals of the community, but also the social institutions and conventions of the community-life and conduct. Let us represent a child, for instance, as a floating center of adaptation in a medium that will embrace not only other social individuals and institutions, but will also hold in solution the whole current mass of conventions, convictions and tendencies that are characteristic of the time. This complex will represent the environment with which the child's consciousness will be in interactive relation. What, then, shall we designate as social heredity? It is possible, of course, that social modifications may be transmitted in a direct, organic way. But our opinion as to this would be largely determined by the theory of heredity which we regarded as nearest the truth. It is obvious that a Weismannian could have little sympathy with the notion of the organic transmission of social effects. If, however, we recognize the superorganic character of the social, we shall not be disposed to think it strange if we are asked to look in the superorganic field for the principle of the conservation of social effects. In truth, we have been asked by several writers of the present to look into the heart of the social medium itself for this principle of conservation. When we consider this medium carefully we find that it not only contains a mass of what we may call social traditions in solution, but that there is a tendency in this medium for these traditions to embody themselves not only in institutions which perpetuate certain great ideas or trends of the past, but also to give themselves an unorganized though well-defined form in what may be called the spirit, which the past has projected into the present. This spirit will manifest itself most broadly in civilizations, less broadly in national character, so far as it grows out of traditions. It will give itself more and more circumscribed but not less

powerful embodiments in the traditional spirit of tribes, cliques, special institutions and families; the spirit of the family, for example, being one of the most potent educators of the child. The tendency of this conserving force is, therefore, toward fixity of definite types, in distinction from that of the environment, which is a medium in which everything tends to become fluent. Now it is to this conserving force, however it may express itself, whether in the perpetuity of institutions, the conservation of literature and art, or in the hereditary spirit of family, tribe and nation, that the name social heredity is to be applied, and it is evident that when we have overcome a little our biological prejudices against the superorganic in general we shall be ready to admit that we have a force here which performs a real function of conservation and transmission. We shall take the liberty, then, to agree with those who have thus defined the principle of social heredity.

The second problem we have to determine is the form which the responsive, adaptive movement takes in this field. The psychologists to whom we have referred develop two lines of investigation which have a bearing on the question, the first of which has for its object the exhibition of the general method by which the subject-consciousness comes to a realization of itself and its world, while the second aims to determine the principle by means of which this result is achieved. Now in regard to the general method by which the subject-consciousness realizes its world, it has been carried almost to the point of demonstration, I think, that the movement is first objective. Consciousness goes out upon the objective world in some pulse of aggressive activity, and in this act is able in some way to penetrate and realize its object. This leads to a return reactive movement in which consciousness, as the result of its penetration of its world, attains to a higher and better defined conception of itself. The general movement is thus circular and embraces objective and subjective stages. What, then, is the principle through which this movement

realizes itself? Here again we come upon a superorganic phase of our problem. The principle or category which was first pointed out by Tarde, and developed by Baldwin, Royce and others, is that of *imitation*,[1] a term that is somewhat difficult to define, but whose operation may be definitely conceived. Let us suppose that a boy of say six years, who is the son of a carpenter, after observing his father plane and fit together some flooring boards, procures a plane and some pieces of board and makes the effort to plane them and fit them together.[2] The process is manifestly one of imitation, and the boy has the representation of his father's action as a copy which he is trying to reproduce. By a series of tentative movements let us suppose that the boy succeeds in a passable reproduction of the copy he has set before him. We have here not only a transaction, but an experience. The transaction is the imitative movement or series of movements by means of which the boy has reproduced a certain kind of effect in the objective world. The experience is the subjective reaction of this result, the modification or specification which the self has achieved when it has not only expressed the emotional exaltation which we call the feeling of success, but has also become defined by its knowledge of the feeling of a carpenter when he produces the original of the boy's copy. In other words, the boy has not only produced an effect in the objective world, but he has also defined a consciousness in himself analogous to the consciousness which in his father accompanied the act of carpentry. And it is open to the analyst in this field to point out how

[1] It is a very interesting fact that before the psychologists had begun to appreciate *imitation* as a principle of mental and social growth, such a writer as the late Walter Bagehot realized its great importance as a principle of political organization and made a masterly use of it in his classic work on *Physics and Politics*.

[2] This illustration is taken from an incident that actually happened in connection with the building of the writer's house several years ago.

this new consciousness becomes, by virtue of the fact that it takes the form of a defined idea, a motive impulse to further activities in the same line. We thus have exhibited the operation of a principle which tends to the repetition of activities on a progressively higher scale, and thus to the perfection of the adaptive result.

Let us now pass on to the third point, and consider the kind of modification or specification which the self receives as the result of this process. Referring once more to the case of the boy, it is clear that the knowledge of the way in which an objective act of skill is to be performed will not be the only respect in which his self-consciousness will become defined. More important than this in its psychological bearings will be the fact that through his activity the boy is able to enter into his father's consciousness and to realize, in fact, how a carpenter feels in connection with his work. In short, he has made an important step in the direction of mastering the carpenter's point of view from which he contemplates and reacts upon his world. We have, now, only to change the illustrations to forms that are more distinctively social, as, for example, the imitation by children, of family, social or religious functions, in order to be able to see that this category of imitation stands as a definite mode, whether we regard it as the only mode or not, by and through which the growing consciousness not only makes progressive definition and qualification of itself, but also progressively defines the inner nature of its social other.

If now we take into account both lines of psychological investigation, we find that in both inquiries the social vindicates itself as an essential element in the defined consciousness of self. The analytic inquiry made this clear by showing that to strip off the social modification is also to take away the definitions of self-consciousness, so that where the process has been completed there will remain nothing but the wholly undefined cardinal self which the whole investigation has presupposed. The various social

selves are reducible, therefore, in the last analysis to phases of the one central self. The results of the genetic inquiry have been found to be on the whole confirmatory of the result of analysis. The problem here is one of history, and the aim is to show how the self develops its social character. The outcome of the investigation is, as we have seen, not only confirmatory of the result of the analysis, but it teaches an impressive lesson in its own way. When we have followed the process by which the social elements gain entrance into the growing consciousness, and have seen that it is the very process also in which the self-consciousness becomes defined, our conviction becomes that of one who has been permitted to be present at a demonstration.

Admitting the truth of the doctrine as thus far developed, it is still open to us to ask whether the boy's own subjective consciousness with which he accompanies the progressive stages of the objective activity is not his only immediate experience, and whether he does not learn how his father feels in a given situation, by traveling through that situation, and first learning how he himself feels in connection with it.

This seems to be a more adequate view, and we are disposed to recant anything we may have said to the contrary, and to put in its place the statement that the boy learns the true subjectivity of situations by traveling through them, and that having the model of his father traveling through the same situation in mind, the interpretation of the father's consciousness is the result of a largely spontaneous application of analogy. This will enable us to define the boy's relation to his model in a way that will save the initiative to his own consciousness; for if it turns out that there is only one way of getting at the inner consciousness of another, namely, by traveling through some objective movement in an imitative way which generates directly a modification of our own consciousness that is referred to the consciousness of the other, through the model

that connects it with the same kind of activity, then we are in possession of a datum that will be important when we come to determine how one conscious self may *interact* with another.

Analysis of the situation makes it evident that the above statement of the case is correct, and that while the boy seems to be reading his father's consciousness directly through his model, he is, in the first instance, determining his own consciousness by means of the imitative activity, and reaches the *construct* of his father's consciousness only by what we may venture to call an *immediate analogical inference*. If this be true, the question may arise as to the precise function which the model performs in the boy's development. The imitative function is clear enough, and there can be no question that what the boy has in the foreground of his consciousness is not simply a representation of a series of movements, but rather the representation of this series as connected with, and as being the movements of, a definite individual, his father. The whole model is, therefore, a representation of his father performing a series of movements and the boy's attempt to imitate the whole situation. It is clear, then, that the effort to imitate is in reality an effort on the part of the boy to identify himself with his model, and that this identification involves his reading himself consciously into the standpoint of his model, so that his own consciousness and that of his model, so far forth as that special series of activities is concerned, shall be the same. Now we have here, I think, an instructive example of the typical method by which the self comes into conscious relations with other selves and is able to form constructs of the selves which stand related to it as its social others. We are not dealing here with the practical motives that may enter into the situation and lead to actual association. Men, as a matter of fact, associate for all sorts of reasons. The question here is different. Assuming that men do and will associate for a variety of reasons, we ask: What is that cognitive process

which makes it possible for them to associate and without which association of the social type would be impossible? Mr. Spencer has given a general answer to this in the second volume of his *Psychology,* in which he maintains that in order to sympathize with our fellows we must be able to represent to ourselves their consciousness and their actual mental condition.[1] Now the whole theory of imitation may be regarded as a grounding of this general principle by showing how the representation of another's consciousness is achieved. And the analysis of the imitative situation has led us to expect that in it we have involved the most vital point of cognitive relationship between one individual consciousness and another. Let us endeavor, then, to make this clear. We have seen that a necessary condition of imitation is a model in the foreground of consciousness. The boy's model is his father planing and fitting floor boards. Only a part of this model is, however, an external representation. The most vital part for us is internal and consists in a construct which the boy has formed of the consciousness of his father. If now we scrutinize the situation with sufficient care we shall find that the boy's construct of his father's consciousness which he has incorporated in his model is one that is defined just so far as his experience of his father enables him to define it, and beyond that it is undefined, or at least but vaguely guessed at. And the point of vital interest here is the fact that, before the imitative activity begins, just that part of the father's consciousness which is directly involved in the series of movements the boy is trying to reproduce, will be an undefined region for the boy, and that the imitative movement will have as its result its definition. Let us represent this part of the father's consciousness by x; it will be clear, then, that to the boy x is an unknown quantity, and that the value of this quantity is to be de-

[1] Principles of Psychology, Vol. II., Corollaries; I., Sociality and Sympathy.

termined by the experiment itself. That x shall be an unknown quantity is then an essential condition of the experiment. The boy is doubtless unaware of this, and he is least of all interested in a psychological experiment. All that he is conscious of is the fact that his model is interesting to him, and that there is a, to him, undefined impulse to attempt to realize it. Nevertheless, he is taking part in a very profound experiment, and is putting both science and metaphysics under obligation. Let the problem here be to determine the value of x. Now the known terms are the present consciousness of the boy, which is undefined in its relation to x; the model which connects a series of movements with the father's consciousness, which to the boy is also undefined as regards x; and thirdly, the impulse to imitation—that is, to a reproduction of the model. These are known data. How, then, will the boy proceed to ascertain the value of x? The answer will be as follows. Obeying the impulse to imitate his model he will, no doubt in a very tentative way, proceed to perform the series of movements involved. He will provide himself with a carpenter's plane and with some pieces of flooring board, and will proceed to use the plane as he has seen it used, and finally to fit the pieces of board together so that the raised part of one will fit into the groove of the other, and he will no doubt prosecute the experiment until he has succeeded in obtaining a satisfactory result. This will represent the whole outward process, and will be all perhaps that the boy could give a very clear account of to his own consciousness. But in the meantime x has not dropped out of the problem, and some very important steps have been taken in the determination of its value. For the boy has been learning how a carpenter feels in connection with his work, or this part of it, and in doing so has defined his own consciousness as respects the unknown term x. The value of x expressed in terms of his own consciousness is the first-hand knowledge he has acquired

of how the carpenter-consciousness operates in connection with this particular series of movements. We have, then, as the first step in the solution, the determination of the value of x for the boy's own consciousness. But it still remains to determine the value of x for the father's consciousness. The peculiarity of the situation here is, of course, the fact that the father-consciousness is assumed already to know the value of x for itself, and that the problem is altogether one for the consciousness of the boy. How shall the boy reach the construct of his father's consciousness so that he may be able to sympathize with him in his work? It is clear that in order to discover the value of x in the father's consciousness the boy must realize it in his own, and then using his own x-defined consciousness as a model he will, by the use of the analogical reference, construct a like-defined consciousness for his father, and will assume that his father's conscious relation to his work will be the same as his own. And having thus determined the value of x for his father's consciousness, he will be able, taking the common value of x as his basis, to enter sympathetically into his father's experience.

The above analysis has been followed out far enough to enable us to see clearly the modes by which one conscious self enters into and realizes the consciousness of another self. There is no magic involved, nor is the relation purely outward and extrinsic. But we find that, through the stimulus of the model in the foreground of consciousness, the boy (and his experience may here be taken as typical) enters into a series of movements which enable him to effect a new definition in his own consciousness, and it is through this self-definition that he is able to form his construct of the consciousness of another. Now it is evident that we may extend this analysis beyond the limits of well-defined imitation, so as to include the direct as well as the indirect methods of interaction, and the principle will be the same. I mean by this that, whether

we conceive the father as reacting directly upon the boy, or the boy as reacting directly upon his father, it will be true of these direct reactions, as it is of the indirect reactions in which imitation is overt, that each, in order to reach a construct of the consciousness of the other, must draw it up in terms of his own inner experience in similar relations. This brings the issue to a point where the last and most vital term in the theory of the social consciousness may be brought out and defined. We have seen that every step we take in construing the inner consciousness of another—that is, in conceiving the existence of another like ourselves—is preceded by a specific definition of our own self-consciousness in just the respect in which we proceed to define the other; and we have discovered this in connection with the fact that we were able to reach this definition, first, of self, and then, of the other, through the medium of some common outer movement or series of movements, which we were able to relate to both self and the other as their common activities. Neglecting this latter feature for the present and taking into account only the inner relation between self-consciousness, and that of the other, it is clear that the condition of being *innerly* conscious of another self is the becoming ourselves conscious in the definite sense involved, and that it is from this definite self-consciousness that we form the construct or concept from which we read ourselves into the consciousness of the other. The primacy of self-consciousness is thus secured, and the consciousness of the other is, in this fundamental sense, its function. When, therefore, we ask, either how the self comes to ascribe its analogies to another, or how the other secures for itself a representation in the consciousness of the self, and thus the power to influence it internally; the answer must be one in which this primacy is respected. For, whether we suppose that the consciousness in which the effect is to be produced has before it a definite model, as in explicit imitation, or simply certain

outer signs which it interprets, we shall find that the interpretation in either case will involve the bringing of the sign to the touchstone of some inner experience. Thus, when the child begins to cry on seeing her companion's finger bleed, the result is no immediate effect of the representation, but acquires its emotional power through some process which associates it with an inner experience of pain of the child's own, arising from an analogous cause. The touch that makes us kin is, therefore, an *inner* touch, while the objective and outer motive which leads to this touch is either an imitative movement or a representation that is rendered capable of a reference to the inner consciousness of another by means of its prior association with inner experiences of our own.

The conclusion of the whole matter may be stated in the following terms. We learn as the result of certain experiences to ascribe our inner consciousness or its analogies to another being like ourselves. The outward instruments of this act are, broadly speaking, associations and imitation. But when we pass from the problem of the mediating instrument to that of the internal experience itself, we find that we are able to enter into conscious social relations with our social other only by virtue of the fact that we are able by these agencies to make a register of experiences in our own consciousness, which we are led to regard as a true equivalent of experiences in the consciousness of the other. We are led to repose this confidence in the representative character of our own experience, not through the imitative and associative activities themselves, but first and proximately by the similarity of our imitative movements to the model we are reproducing, and ultimately by the conscious activity in which we assert the other as a real existent. This is fundamental; we first assert real existents and then we bring ourselves *en rapport* with them through a similarity of their inner experience with our own that is inferred from the similarity of our outer activity to that of the model imitated.

The problem we have been investigating here is not that of the character of the individual as a *socius,* but rather the question how he comes to be a *socius* and the method by which he comes to apprehend his social relations. We have seen that sociality could arise at all only on condition that conscious beings should find some satisfaction in the presence of other existents like themselves. We have in this chapter specially concerned ourselves with the cognitive aspect of our problem,—the means by which conscious beings become aware of their social relations. The problem has been one of form rather than one of substance. If we ask what is the substance or the stuff of sociality, we are simply asking what there is in a conscious being that would interest it in another conscious being or make it interesting to its other. This is a question to which an answer in terms of detail would be practically impossible. But we may reach certain broad generalizations which will have value. Let us not, in the first place, forget the elements of the social situation,—at least two existents in conscious intercommunion. If I am to be in social relations with you, I must at least be aware of your existence. But I must be aware of more than this, I must find you interesting in some way, and interesting in a practical sense. You may be interesting in the way of setting theoretic problems without being socially interesting. To be socially interesting you must at least set practical problems. Well, let it be so; interest presupposes feeling, and feeling the ability to be pleased or pained by what comes to us in our experience. If I know you as a social other, I know you as possessing the same capacity for being pleased or pained by the experiences which come to you. And each of us knows that the other knows. What then? Simply that here is a situation that is like a train of gunpowder for social phenomena. Cognitively, each of us enters into the consciousness of the other and becomes a spectator of his life. And thus each learns to know what pleases and pains the other and to enter into this

other's experience sympathetically, as Mr. Spencer says. I think though, that we need two words here instead of one, for we may hate as well as love what we see. Let us say sympathetically or antipathetically. And entering sympathetically or antipathetically into the situation of another, we shall either identify ourselves with the feeling of the other, or we shall set ourselves against it and experience the opposite feeling. Thus sympathy or antipathy, benevolence or malevolence, will be developed. These are two names for general attitudes of feeling and will, and they are determinants of all social relations. Of course there will be gradations between these, and mixings of these and perhaps points of difference. But broadly speaking, social events will be determined along these lines.

We cannot assume, then, that in all cases the interest we take in our other, even though it forces us into social relations with him, will lead to results of comity. Antipathy is just as natural as sympathy, and malevolence is no less normal than benevolence. Sociality includes hates and antagonisms with their consequent separations and disruptions, as well as loves and sympathies with their bonds and organizations. What can be said without qualification is that the whole social situation is a practical one; that it rests on community of nature and that this community of nature begets community of interests and community of likes and dislikes. Thus it comes about that while the social includes the dislikes as well as the likes, and is interwoven throughout with antagonisms and dividing interests, yet the very origin of sociality secures that the forces of adhesion and organization shall be inclusive of, and stronger than, the forces of separation and disorganization. For when we say that sociality arises because one social being finds another practically interesting, the fact of social organization itself is sufficient to prove the dominance of the sympathetic over the antithetic forces. Were the antithetic forces to become dominant, this would mean a dissolution of all sociality.

None the less are they social forces performing a social function in subordination to the forces of organization. The units of which the complex social web called the community is made up, are the social individuals we have been studying. We are ready now to take up the problem of the social community.

CHAPTER VII.

SOCIAL ACTIVITIES.

B. *The Social Community.*

In developing the doctrine of the social individual, two things have been made prominent as essentials. The first is the fact that sociality is an original attribute of man's psychic nature. God does not make man a biped and leave it to circumstances to make him a social being. He is by nature a being who can be reached only through his internal susceptibility for receiving and returning impressions. The fundamental interactions of his nature with other natures are social. This was the first point. Again, in seeking the processes and agencies by which the individual consciousness develops its *rapport* with its social other, we have been led to emphasize not only *association,* the operation of which is clear, but more especially *imitation,* the principle on which a group of recent thinkers including Tarde, Royce and Baldwin, have put so much emphasis, and we have made an elaborate attempt to show how these principles, and particularly the latter, stand central in the history of the making of the social individual. Now the doctrine of the social community rises directly out of that of the social individual. The nature of the individual supplies the norms of all the ground-concepts of sociology. This would scarcely be admitted by those sociologists who take a wholly objective view of their science, regarding it, with Spencer, as a description of social phenomena under biological

analogies; with Quetelet, as a statistical study of social facts; with Durkheim, as concerned principally with the division of labor; or with Gumplowicz, as finding its chief theme in the struggle of the races. There is no question here as to the necessity of the objective investigation in order to complete the data or the method of the science. What is contended for is simply that the constructive norms which supply the ground-concepts of the social community can be most successfully discovered and formulated by a study of the social consciousness as it manifests itself in communal forms. In the first place, what is the basis of what we call sociality? The answer sends us back to the individual in whose social nature we seek the norm of all social organization. This norm has been characterized in various ways, among which that of Professor Giddings is, no doubt, one of the most suggestive.[1] Let us with Giddings define this norm as the *Sense of Kind*. What, then, is the sense of kind, and how does it become a fit basis for social phenomena? We are obliged to go back to the individual in order to determine. Our study of the social individual has revealed to us the grounds of his social activity. In the first place we know that he must be a real existent and not a mere phenomenon. Secondly, he must be a conscious being. Otherwise he could be social in appearance only. Again, he must be a cognitive being, capable of developing some kind of a representation by means of which he is enabled to enter into and realize the conscious activity of his social other. We have learned in some detail the importance of the cognitive medium, which may be represented, of course, in accordance with any stage of mental development.

All this, however, is preliminary to the real social reaction which occurs when one conscious unit, through

[1] I take Professor Gidding's work as typical because the terms he uses seem to lend themselves with equal facility to analytic and genetic treatment. I have not been unmindful of the important work of other writers even when I have not directly referred to it.

the medium of its cognitive insight, enters into the conscious life of another conscious unit and finds it interesting. The first explicit act of sociality takes place when one unit consciously realizes the conscious states of another conscious unit and enters into them sympathetically or antipathetically. When *a* is able to realize and enter sympathetically or antipathetically into *b*'s feeling-reactions which express themselves in satisfactions or the opposite; in such a way that he experiences in his own consciousness a measure of the same feeling-reactions or their opposites, he has performed the initial act of sociality. But in pointing out the fact of the social reaction and its mode we have not answered the question why the social experience should take place at all. We have seen that consciousness is a condition, but what if the units were totally different in nature, so that there could be no points of conscious community? This may not be possible, but it is at least conceivable. It would then represent a purely anti-social situation out of which no social phenomenon could arise. There must be a common nature, and I am prepared to accept Professor Gidding's sense of *kind*, provided it be not too narrowly construed. The conscious unit in order to enter socially into the life of another conscious unit must find this unit its *real* other, a being of the same species as itself. There must be a community of nature to the extent that will enable the one unit to find in the other a type of feeling-reaction like its own, so that its feeling regarding it, if put into words, could be stated as follows: "In this being's feeling-reactions I find my own way of reacting repeated. It is a being, therefore, in which I find myself taking the same kind of interest as that which I have in myself." If we keep the question of method separate here from the question of fact, I do not see that there can be much ground for difference of opinion as to the fact. The sense of kind will simply be my sense of the sameness of the feeling-reactions of another conscious unit with those I am conscious of in myself.

Now, regarding this sense of kind two questions may be asked, (1) How is it arrived at, whether gradually or by a sudden *coup*? (2) What does the sense of kind include? No doubt the process by which a conscious being comes into full possession of the sense of kind is ordinarily very gradual. A multitude of small circumstances may enter into it,—physical combats, collisions and coincidences of movements, harmony and clash of objective aims; all the multitudinous affairs of life in fact. It will be influenced, too, by the stage of conscious development which the social unit has reached. In the puppy it will be more physical and more purely instinctive than in the child. We must bear in mind, however, that we are dealing here with a process that is mainly cognitive. Not kinship itself, but rather the means by which we become cognizant of it, is the topic here. This, as we know, was the central theme of the last chapter, and we are only enlarging on it here in order to accentuate the notion of process and the multitudinous factors that enter into it. Some of the most important chapters of sociology have been written on this very topic. But here it is incumbent that we should avoid details.

The second question as to what the sense of kind includes is one that will naturally call forth more debate. The sense of kind arises, as we have seen, as a sense of the sameness of the feeling-reactions of another conscious unit, with our own. This will give rise to the sense of community of conscious interests and aims. The sense of community of type in modes of feeling-reaction, together with the ensuing sense of community of conscious interests and aims, will, when they become incorporated, form the developed basis of sociality. Let us consider, then, what this ground-notion of sociality includes and what it excludes. We have seen that it excludes as anti-social the notion of completely antagonistic forces. A plurality of conscious units completely hostile and opposed would be incapable of community; would, in fact, be negatively

opposed to it. Again, it would exclude conscious units that have no points of likeness in their nature. Such units, while not actively hostile, would be simply non-social. Again it is clear that sociality would exclude a condition where the sympathetic and antipathetic forces were exactly balanced, for here we would have a situation in which nothing could take place. But here exclusions must end. We cannot construe the notion of sociality in such a way as to exclude antipathetic and antagonistic forces. These are inherent in the life of sociality and are necessary in order to relieve the social situation from monotony and boredom. The notion of sociality only requires that the antipathetic and antagonistic forces shall be held subordinate to those of sympathy and organization. It is just in this connection I would venture a criticism on the work of Professor Giddings. In defining the sense of kind as the fundamental category of sociology, Giddings deems it necessary to segregate it from certain economic and other forces with which it is thought to be antagonistic. This seems to me to entail an undue contraction of the social field, which if enforced would be bad for both sociology and the excluded phenomena. I believe a more adequate psychology (or shall I say logic?) would lead to a conception of social identity that would not exclude difference, just as a true organism involves differentiation as well as integration. My social other need not be an exact duplicate of myself. He is my *other* in the sense of being in some way different from me. My social other is such because I am interested in him, and I am interested in him because I find a being whose feeling-reactions upon the world are like my own in species. But it is overstating the case for sameness of species to say that it involves identity without difference. Were it so, then what I am interested in, in my social world, is the discovery in my others of exact duplicates of myself. But I am conscious of desiring no such thing On the contrary, I recoil from it as from a condition of monotony and boredom. The sense of kind must be construed,

rather, as an identity that, as the logicians say, realizes itself in and through difference. It must at least be consistent with difference. Now, social difference is, of course, difference of feeling-reaction, and this will involve difference and antagonism of interests and aims. The only alternative excluded here is that of total difference, which would mean the anti- or non-social. But anything short of total difference may be included in a concept of sociality. We cannot reject ordinary differences and conflicts even when they reach the gravity of war, as non-social or anti-social. They are simply features of the broader play of social forces which include clashes of interests and antagonisms.

Taking the above as representing more adequately the concrete social situation I think it will enable us to reach a concept of social activity that will not be one-sided or exclusive. Let us take as an illustration of the complexity of ordinary social movements the conflict which sometimes arises between the workingman's desire to continue work at the current wages, on the one hand, and his feeling of sympathy with the ends for which a strike has been ordered and his fear of being ostracized as a scab by his companions, on the other. The question here is whether the whole situation is not to be regarded as essentially social. Take the more distinctively economic motive, the desire to keep on earning wages. This may, in fact, be variously related to the wage-earner's life as a whole. He may have a family to support and may respond more strongly to this phase of the social situation than to any other. He may, on the other hand, be free from family ties and may be actuated either by the relatively selfish desire to increase his hoard, or by the feeling that his personal right to order his own life is interfered with by the strike-order. Whatever motive we ascribe to him, short of indifference or antagonism to the interests and well-being of his whole social environment, it will be possible to show how his conduct may be subsumed under the

categories of sociality. Let us suppose his motive to be of the more personal and self-regarding type. It will not cease to be social by virtue of the fact that it is self-regarding. The self-regarding motive and conduct may be, and doubtless often are, socially justifiable, as when a single individual resists the tyranny of the mob in defense of his personal right to dispose of himself or his labor. It is not enough, then, to determine motive or conduct as self-regarding in order to exclude it from the pale of sociality. It must be shown to involve something that is inimical to the social, that will not from any point of view contribute to social organization or progress.

Returning now to the illustration of the worker who stands out against the combined action of his fellows, we may say that he is not thereby proving himself anti-social. He may be acting under a broader or higher social ideal in which his motive and conduct are included. The motive and conduct of his fellows, who are now his enemies, are included in the social ideas of their class. In view of these they are social and organizing, while his motive and conduct are anti-social and disorganizing. But so are their motive and conduct in view of his broader and higher social ideal. But this conflict of ideals will be mediated by an ideal that is more broadly human and that includes the partizan difference which divides the individual wage-earner from his class, under a broader or higher category. For example, they may be common members of the same lodge or of the same state, and here will be a bond that transcends the plane of the difference and in view of which the difference, to use a Hegelian term, is *aufgehoben*. Only when the motive and conduct of the individual rebel is purely and abstractly selfish is it inimical to sociality in any form. And only when the motive and conduct of the strikers refuse to be *aufgehoben* in view of any higher social ideal, do they become iconoclastic and anti-social. Thus we may reasonably call anti-social the motive and conduct of those labor-

organizations which are led to set themselves against the state and to attempt to override the common law.

Now all such motive and conduct, whether their bearers be individuals or groups, may be included under the term selfishness, and selfishness may be defined as the disposition to assert particular interests against interests that are higher in the sense of being more general, and in which the particular interests are included. Thus, in the order of comprehensiveness, the welfare of the state outranks that of all included organizations, and these in striking at the state are really aiming a blow at their own foundations. It is here, I think, that we come in sight of a rational principle of distinction. It is not *all* difference or antagonism that is anti-social. But only that form of it which falls under the category of selfishness. Only that antagonism which takes the form of opposition of lower and particular interests to higher and including interests can be regarded as anti-social. And the reason is that the principle of such antagonism is hostile to social organization in general. It is divisive and dissolving and leads inevitably to anarchy and social chaos. But ordinary differences, antipathies and antagonisms give rise to mere partizan clashes that are mediated by a higher social principle embodied in the interest of a larger and comprehending social group. Thus war ordinarily is not anti-social, but represents mere partizan difference which is mediated on some higher plane. War only becomes anti-social when it is loved and followed for its own sake.

The second fundamental concept of sociology is that of the *social medium*. In determining the sense of kind we have been dealing with the social atom, the individual, the material term of sociology. But the science deals directly with social movements in a medium and it is a vital question, therefore, as to how this medium is to be understood. Regarding this medium we shall ask, (1) for its conditions, (2) for its constituents, and (3) for the modes of social movement which develop in it. The conditions of the

social medium are, of course, first, that there should be a plurality of social units which have developed the sense of kind as above interpreted. The social world is analogous to the physical in that it presupposes a plurality of social atoms as the condition of its existence. A second and the most distinctive condition of the social medium is the existence of *groups* of social units. By groups are not meant mere aggregates, since mere aggregation is not a social category. The social aggregate is a group of social units which have been drawn together by the sense of common nature and interests. The socially endowed individual thus conditions the existence of the social group. A third condition of the social medium is the interaction of the units of the group. The lines and spheres of activity of these units must meet and touch those of others. And this contact cannot be merely mechanical. There must be an interpenetration of spheres through the cognitive media as already indicated, so that there may be a greeting of interests on the plane of sympathy and antipathy. In short, we must presuppose a social aggregate in which both the interrelations and reactions among the individuals are of the species social. We shall then have present the conditions of the social medium.

How, then, is this social medium constituted? Let us take for illustration an aggregation of stones comprised of broken pieces of rocks in all conditions of unhewn roughness and in all shapes, and, to complete the analogy, let us endow these stones with a capacity for interaction. They will thus constitute an aggregate of interacting units. If we observe the condition of this aggregate long enough, we will begin to observe two species of change setting in and progressing. One is in the character of the stones themselves. Their constant rubbing together begins to modify their form. They lose their jagged edges, become more smooth and approximate more closely to the uniformity of pebbles. On the other hand we observe a common medium of sand appearing gradually and composed

of the pulverized parts of the pieces broken off in the process of rubbing together. This sand comes in the end to be a conspicuous feature and to constitute the common bed or medium in which the individual stones are found. Now this common bed of sand may be taken to represent the social medium which has its rise in a similar way. The individual units rubbing together in the interactions of their social interests, by degrees certain parts are broken off in the process and form the nucleus of a common fund. In each of these broken bits we have the germ of a common interest that has, by virtue of its commonalty, ceased to be the exclusive possession of any one, and is, therefore, the common conscious possession of all. Moreover, this beginning of common interest expresses itself in a conscious need that is common. A germ of public sentiment thus comes into existence, and around this is organized some form of co-operative effort which has for its aim the satisfaction of a community-interest. This co-operative form may take the direction of providing and improving public streets, instituting some common means of instruction, organizing some way of improving public health or of beautifying the town. The special direction of the movement makes no difference here. The point of interest is that it springs out of a common motive and this motive is no longer merely individual, but has its place in a common social medium. A community-consciousness of individuals has come into existence, and this becomes the organ and bearer of public sentiment.

To this social medium we may apply the term *Communal Mind,* and we may carry our analogy further and designate as *Communal Intelligence,* the means by which social progress is secured, while to the conserving social function we may apply the term *Communal Memory.* The truth is, such terms have much more value for social science than the biological analogies which the Spencer school employs so extensively. And the reason is not far to seek. Social activity is a function of consciousness, and the social

medium to which our attention has been called is a conscious medium. But the social medium, the common consciousness which the community develops, is the analogue in the social field, of the protoplasm of the biologist. It is the social tissue or matter which supplies the basis of social movement and organization. Naturally, then, the form of the movements as well as of the consequent organization will be of the psychic and conscious type and the sociologist will find the most vital roots of his science in psychology. A caution that is needed here, however, is that, in employing the terms communal mind, communal memory and the like, the question as to the degree of reality that is to be ascribed to them cannot be settled offhand. Whether the community-consciousness represents anything but a common mode of activity on the part of the individual consciousnesses of the social units is a question that must be settled on its own merits.

To the consideration of this question we pass immediately. We have spoken of the social medium as the gradual product of the accretions from the interactions of the social units in a group, and this medium we have named the communal consciousness. Now this result is valuable provided we are not misled by the supposition that we have been employing anything more than a material analogy. The social units are not pebbles, nor is the communal consciousness a body of sand. The social units, as we saw in the preceding chapter, are selves, and the purpose of that chapter was to show how the individual self becomes also a *socius*, a self with a social consciousness that responds to a social other. The social community is a group of such units, and the aim of the doctrine of the social medium is to show how these socially endowed individuals develop a communal consciousness which constitutes the true medium of the movements that are distinctively social. What we wish to determine here is (1) something as to the real nature of this social medium, and (2) the conditions of its development. The analogy of the sand has value as bring-

ing. out one important feature of the social medium; its commonalty, or what recent writers call its *publicity*. But it does not shed any light on two other questions which press for answer; namely, Of what kind of matter is the social medium constituted? and What is the mode of publicity itself? How does the content become common? In a chapter in his *Social and Ethical Interpretations*, Baldwin distinguishes between the form and matter of social organization. The form he regards as imitation, while the matter he finds to be purely intellectual. The materials of organization, in other words, are the thoughts of the social units. Social progress is thus regarded as a function of intelligence as distinguished from will and feeling. In another place the same writer further describes the thought involved as the "self-thought-situation," meaning the social unit's idea of the concrete situation upon which it reacts in some form of social response.

Now if the writer in question means simply by this that intelligence must take the lead in all social organization, that without thought no social progress would be possible, then I can agree with him wholly. The position has been elaborately developed in these discussions that all conscious activity is mediated by cognition, and that social activity is mediated by a special form of cognition which may be called social. But in the chapter on *The Matter of Social Organization*, our author seems to make an exclusive claim for thought which I find myself unable to admit. It is one thing to give the primacy to thought in the field of social movements, and quite another to claim that it is the sole factor in social progress. But this claim is practically made when thought is regarded as the sole matter of social organization. The objections I would urge here against this exclusive claim are: (1) that it ascribes to the intellect an efficiency which it does not possess in the abstract. For thought, even when we translate it into terms of self-thought-situation, can have no power of a

practical character apart from the appeal it makes to the feelings and will. And it is only when the emotional nature leaps forward, as it were, in endorsement of the situation, that it acquires social efficiency. This leads to my second point, (2) namely, that the matter of social organization will be the concrete social impulse itself which is not exclusively intellectual but rather a practical movement of feeling and will, informed and guided, it is true, by intelligence. In short, we cannot see our way clear to any other conclusion than that the concrete social motives and the matter of social organization are identical.[1]

This brings us back again to the general question of the nature of the social medium. The matter of social organization is reducible to the concrete reactions of the communal consciousness under the guidance of the intellect. If the question be one of method,—how the social reactions are effected,—then the theory of imitation supplies the answer. But the question of method is subsidiary here to the more fundamental question as to the nature of the social movements themselves. What is it that constitutes a movement social and thus differentiates it from movements of other species? The answer has already been partially given. A social movement will be a function of a social self in view of the social situation. This gives its form. It is "a self-thought-situation." But what is it that pulsates in this form and makes it alive? It is something that interests us, that enlists our feelings and will in either an egoistic or an altruistic direction. For we may enter sympathetically or antipathetically into the experience of another being like ourselves, in two different ways; or rather in one concrete way that splits into vital dualism. Our reaction upon our

[1] To use Baldwin's own figure, if we take a cross-section of any progressive social movement we shall find it to be internally, a palpitating pulse of will and feeling informed by thought or idea; that is, by the self-thought-situation. To this I am able to agree; but it seems to me to be different from the statement that the matter of social organization is purely intellectual.

first experience of the situation may be dominantly either egoistic or altruistic. Our social action may be determined, in other words, either by the agreeableness or disagreeableness of the other's experience, to ourselves, or by its agreeableness or disagreeableness to the other. In the one case we hold ourselves aloof from the other and act egoistically. In the other case we identify ourselves with the other and act altruistically. If we suppose this experience to be reciprocal we shall be in a position to realize the matter or spirit of the movement. It is a reaction upon a formally social situation (we may call it a social cognition), which is determined by interest of feeling and takes either an egoistic or an altruistic form. Let us call this the *genus* of our definition; what will constitute its *differentia*? This leads to the second question as to the nature of *publicity* or *commonalty*. It is not certain at the outset, that every reaction that is generically social will be able to take its place as an element in the social medium. The reactions between *a* and *b* may be so private that they will fail to take on any public character. What do we mean by publicity? If we take the reactions among social individuals in groups, we shall find that some of them will remain private; that is, however vital and important they may be to *a* or *b*, they remain the property of *a* or *b* and show no disposition to take on any more general value. But other reactions will not be permitted to remain in this privacy. They will be selected and a public value will be stamped upon them. It will be found that the principle of selection here is a common interest. Some interest of *a* or *b* turns out to be an interest of all the social individuals of the community, or at least of a controlling number of them. This we call a common interest. And on the basis of the common interest will arise common forms of reaction. If the common interest be in the education of children, or in the means of getting from place to place, this interest will inspire common methods of education and common movements toward the improvement of roads and

means of travel. We may call the underlying motive an interest, a want, a demand; the fact remains that the public action is a function of the public interest that underlies it.

The common consciousness that constitutes the social medium will be made up of these common interests and the forms of activity to which they give rise. The analogy of the pebbles and the sand will enable us to conceive the nature of the process by which this consciousness develops. The attrition of the social interests and actions of the units of the group will lead, through the principle of selection we have indicated, to the suppression of the movements that are not fit but, on the other hand, to the survival and propagation of those that rest on a truly general interest. The social medium will be thus constituted and its development will be due to the operation of forces which we now go on to consider.

What, then, are the conditions of the development of the communal consciousness? This leads to a consideration of what we may call the *social forces*. We are not concerned here with the problems of social evolution and heredity. These belong rather to the history of organized social movements. We are seeking here the factors that enter directly into the constitution of the communal consciousness at any stage of social evolution. Now I apprehend that two sets of forces will have to be taken into account if our view is to be adequate, (1) the individual forces, (2) the forces of the community or social group. The importance of the individual forces will be underestimated only by those sociologists who approach the study of social phenomena exclusively from the standpoint of the community. Against these the social psychologists have triumphantly vindicated the importance of the study of the social nature of the individual. It has been shown that the nature of the social units, the character of the social medium, and even the form of the movements which we call social, can be determined only from the standpoint of the psychologist. Not only so, but the social processes

themselves arising as they do in connection with conscious material are all reducible ultimately to forms of conscious movement. Thus if, with a whole school of sociologists, we find in the principle of *suggestion* the law of the activity of social masses, we are immediately driven back to the psychology of the individual for our doctrine of suggestion. Again if, with another school, we found on *sympathy*, our psychology of the individual is brought once more into requisition. Much more clearly is the dependence of sociology on psychology apparent when we essay to use such terms as communal mind, communal memory and the rest, which would be mere empty analogies, without a concrete psychological filling. The function of individual social forces is so important and fundamental that the temptation of the sociologist who approaches his task from the ground of the psychologist is to regard sociology merely as an enlarged psychology. It is this, in fact, in one whole aspect of it, and, the psychologist is not to be too severely blamed for magnifying his function. Secondly, the *communal* forces. There is another side, however, from which it becomes clear that social phenomena cannot be regarded as the unmodified products of individual social forces. We have already seen how publicity arises as the function of a common interest which leads to common modes of action. It was tacitly assumed, however, that the commonalty of the interest arose out of the equating, as it were, of individual interests. Various *a*'s and *b*'s find that they have the same interests and some of these prove to be co-extensive with the social group. They thus become separated off as common community interests. But this assumption is now recalled as inadequate. What we must add is the fact that the *group* itself supplies a basis for new interests that would not otherwise arise. We have seen already how the representation of the social situation precedes and mediates all social reactions. Here we have simply to extend the application of the principle so as to include among the intellectual media what we shall call

the idea of the social group as a whole. This would not be identical with the ordinary form of individual social representation, that of the self as related in specific ways with social others. The idea of the group, a plurality of socially reacting social units as a whole, now becomes the fruitful element in the representation. The social consciousness finds the community as a whole, as thus presented to it, an interesting object and its interest calls forth reactions in the ordinary way. Thus, for example, civic pride and patriotism arise and are the motives of forms of social activity that could not be stimulated by individual social interests.

We must, then, include the community itself as one of the forces that lead to the development of the social medium. But in ascribing to the community the function of creating new interests and forms of reaction we have not completely exhausted its agency. The group of sociologists who found on suggestion have developed as their fundamental principle what they call the law of *heightened suggestion*, which is simply a formal statement of the fact that a crowd of individuals is more susceptible to the influence of ideas or feelings than would be any of the individual members when isolated. The massing of social units thus seems to have an effect analogous to that of adding fuel to a fire that is already burning. The value of this law for sociology may not be so great, however, as its inventors are disposed to think. It is thought by some to represent a law of social hypnotism which takes it out of the field of normal sociality. The sober student of social phenomena will not fail, I think, to make a distinction between the idea of a social community and that of a mob; for the social community is one that is moved and conserved by a complexity of motives and interests which supply restraints as well as incentives, whereas, the mob is a body of social units which, for the time, have forgotten everything but the one overpowering impulse under which they are acting. The mob's action will, therefore, be wholly different from that of the

normal social community. Perhaps, however, the phrase "wholly different" needs some modification. The action of the mob does, in one respect at least, shed important light on the forces of social activity. In its reduction of the social situation to absolute simplicity, it is a kind of substitute for the experiment in physics; it presents the phenomenon of the unimpeded operation of a single social motive. Now while normal social movements are the results of complex conditions, so that the movement of the mob cannot be taken as a type of normal social action, it still presents to the student of sociology at least two points of interest and value. In the first place, it enables him to see more clearly that the law of heightened suggestion does operate in all social aggregates, and that while in most cases its force is checked by complexity and opposition, yet we have here an example of what it actually accomplishes when unimpeded and of what it tends to produce and actually effects in a greatly modified form in the ordinarily social situation. In short, the law of heightened suggestion may be taken as true and as of universal application if it be regarded as simply a statement of tendency and not of actual fact. One of the effects which the aggregation of individuals produces on the individuals themselves is this general heightening of their spontaneity and the consequent tendency to yield more readily to suggestion. Another point of interest and value is the bearing which this law has on publicity itself. The essence of publicity is, of course, commonalty; when a thing has become public property exclusive individual possession has lapsed and all share in it alike. We have seen that the tendency in the community is toward the development of these elements of publicity or common possession. Now it is obvious that the tendency of the law of heightened suggestion will be toward the development of this commonalty. For the social possession of things in common involves the consciousness of community. But this consciousness may be only half-developed in a community or nation and

it may require the shock of a common calamity, say of war, to rouse the feelings of the members to a point where they flow together into a common stream and empty themselves in some spontaneous movement of the community as a whole. Thus the consciousness of community and of nationality becomes fully developed. We may say, then, that the law of heightened suggestion is a real law of tendency and that it has an important bearing on the development of that form of publicity which consists in the sense of community. It also marks a distinction, as we have already noted, between the movements of individual social units and these same units when acting under the sense of community. The law of heightened suggestion, while it cannot be called a leveling down tendency, inasmuch as the motive of it may be either the noblest or the most base, does in fact contribute to a lower form of movement. But it does this by raising the level of spontaneity and thus encroaching on the territory of reflection and deliberation. In the community as well as in the individual, reflection is the condition of forms of activity which rise above spontaneity. The individual will be socially developed just in proportion to the dominance of reflection over spontaneity. This is also true of the community. But the difference we wish to mark here is this, that the community, *qua* community, will be found to be more completely under the dominance of spontaneity than is the individual and that this difference is due to the operation of the law in question.

We find, then, that the forces which underlie and constitute the communal consciousness, or as it has been called, the social medium, are both individual and communal. The individual forces will account for all the elements of publicity up to the point where the idea of the community itself enters in. This idea of community,—or if we do not like the term idea, this sense of the community as a whole,—becomes the bearer of certain community-interests which the social individual did not feel, and these in turn give

rise to forms of community-action. The development of the communal consciousness and the organizing movements to which it gives rise are thus conditioned by the two sets of forces.

We have seen that certain social forces, individual and communal, enter into the constitution and development of the communal consciousness. The question now comes up as to what these social forces are. How are they to be represented? The group of thinkers who emphasize the law of heightened suggestion also tend to reduce the social forces generally to the form of thoughtless impulses. The action of the mob stands to them as the type of social action in general. At the opposite extreme we find those who tend to put exclusive emphasis on reflection and the movements of thought. Now, important as the intellectual factor undoubtedly is, I cannot but think that a doctrine that restricts the matter of social organization to thought, sins by leaving out of view important elements of content. Thought itself never supplies social motive. It may present a situation that appeals to some form of practical interest, but the social motive, or, as we may call it, the social motor-idea, will be the concrete pulsation that arises out of the feeling-impulse and the representation by which it is mediated. This will be the term that will embody the social experience. If we attempt to isolate the intellectual element in the experience from its practical connections we reduce it to an abstraction and destroy its power to produce social effects. The older thinkers of our era, such as Hobbes, Spinoza and Hume, found the socially efficient forces in the feelings, or passions as they called them, and their tendency was to regard these as distinct from the intellect, so that a kind of dualism between thought and the feelings was the result. Thus Spinoza teaches that man is naturally the slave of his passions, which determine his actions with mathematical certainty. This servitude is only broken when reflection has translated the passion into a clear idea. The mathematical cer-

tainty of the result remains, but an idea-determined action is free and man thus breaks the bonds of his slavery. We have seen, moreover, how the intellect and feeling coalesce in the concrete social movement. If we take a social movement in its concreteness we shall find that it is volitional in its form, while in its content or matter, it is either a thought-informed feeling or a feeling-saturated thought. In all cases there is the implication of the emotional with the intellectual. And this gives rise to a force to which, when it has received the stamp of social normality, the name social sentiment may be applied. We prefer this term sentiment because, while it stands for the synthesis of feeling and intellect, it is also broad enough to include all that body of beliefs, convictions, predilections and prejudices which constitute in every community a large part of the motor-forces of its social life.

Up to this stage of our discussion we have been dealing almost exclusively with what may be called the concepts of sociality; with the nature and the conditions of the rise and development of the social and communal consciousness. We turn now to the *social movements* themselves with a view to determining their nature. By social movements we mean the phenomena presented by the life of communities, or, as we may call them, societies. What phenomenal phases does the life of communities present to the sociologist? There are at least two of these that are vitally important. In the first place, if we attend to the form of social activity we shall find that it embodies itself in certain communal functions which in their exercise lead to the development of certain forms of organization. Thus, to take the threefold division of functions into those of sustenance, defense and education, we find not only the development of these functions, but also of forms of social organization, to serve as their instruments or organs. We thus reach the threefold classification of communal functions and organs, made by the Germans, into the *Nehrstand*, the *Wehrstand*, and the *Lehrstand*. Doubtless the three

most fundamental social functions are those of nourishment, defense and education. This gives rise to the economic, military and educational activities of the modern state. But there are other motives, almost as fundamental, arising; out of man's spiritual nature, for religion and religious organization; out of his aesthetic nature, for literature and art including architecture; out of his intellectual nature, giving rise to science and philosophy and the organized means for the pursuit of knowledge. This is a phase of social movement that has been treated interestingly by the school of Herbert Spencer under the guidance of biological analogies. What we have called the communal consciousness is symbolized as social tissue and this tissue is represented as developing social organs corresponding to those of the living organism. Now, while the biological analogy is no doubt valuable in the sphere of social phenomena, the criticism to which this school is open arises in view of their disposition to overwork the analogy of the living organism and to give it a too literal application. Mr. Spencer himself recognizes the social as belonging to what he calls the superorganic, but this does not restrain him from a very sweeping as well as literal application of biological analogies to social movements. The social is superorganic in two very important senses. In the first place, the social unit is a *socius;* he is not only conscious, but has a consciousness of his other. By virtue of this other-including consciousness his activities transcend strictly organic movements. In the second place, the movements of society are functions of the communal consciousness which, as we have seen, has for its basis the whole community and which develops directly out of itself the normal functions of communal and national life. The fact that social movements are phenomena of an organism-transcending consciousness removes them so far from the organic sphere as to render the legitimate application of biological analogies to social functions extremely limited.

The second phase of interest to the sociologist is that of

the growth or development of social organisms. Social phenomena have a genetic aspect and in the order of time, societies, nations and civilizations present the phenomenon of development. Here also the too literal application of biological analogies has worked mischief. For while it is no doubt true that human society has passed through the phases of an evolution, and while it is true also that society is able to conserve its results by some principle of heredity, yet both these processes must be determined in view of the essential nature of society itself. Now, the essence of the social nature is consciousness and its differentia is commonalty or publicity. If we conceive a consciousness whose interests and forms of movement are public in their character, then we have truly apprehended the essential nature of what we call a social community or society. No doubt the social units are also biological units, which, as such, are subject to the laws of biological evolution. And this will also have an indirect effect on the social. But what we are concerned with here is the phase of the development that is distinctively social.

Having thus limited the question, it is clear that all the forces of social evolution must operate through consciousness. They must, in other words, take the form of conscious *motors*. The social unit, in order to be socially moved, must be approached through its social consciousness, and a community, in order to be socially moved, must be approached through its public or communal consciousness. Our fruitful analogies here will come from genetic psychology rather than from biology. For just as genetic psychology shows how, in the two processes of *accommodation* and *habit*, the individual progresses and secures the results of his progress, so in the social field the sociologist will find analogous processes at work. The social accommodations leading to the development of the communal consciousness by the addition of new material, while the operation of habit will simply be that selective function of the community by virtue of which some of this new material will be stamped with publicity and will

take its place as an element in the social medium, while the rest will be suppressed. In the life of society as truly as in that of the individual, this double process will be found to be going forward. Now when we seek further to determine the *modus* of social evolution, we find that the whole movement is conditioned by the occurrence of *variations*. The increments we spoke of as resulting from social accommodations are not mechanically achieved. We must bear in mind that the social movement is a movement of consciousness, and that consciousness can overflow its banks only by conceiving some new situation. This will not be a function of the community, but generally of some individual member. The new situation he conceives will stand for a variation, and it will be simply a signal for that dual process of social accommodation and habit on the part of the community which will lead to its adoption or rejection. If the variation be conserved, we shall have a step in social progress, either of advance, change of direction or increase of complexity. Baldwin has pointed out more clearly, perhaps, than any other writer in this field, how the social variation will always in the first instance be the function of some individual. The innovating individual takes his chances, like any other variation, of being suppressed, or of having his proposed reform rejected. Whether society adopts or rejects the variation will depend, of course, in part on the susceptibility of the social organism itself to new changes, and in part on the character of the proposed innovation.

Social evolution will show itself in a growing complexity of function and organ and in the forward movement of society, as a whole toward the realization of higher ideals. Of course, we are to avoid the identification of social evolution with mere social change. Mere change is not progress. A change may not be a variation at all, and if it is, it may be one of those variations that are destined to be suppressed. Social evolution is the movement which arises out of the selection and conservation of fruitful

variations. But evolution would not be possible were there not some way of rendering its results permanent. We have seen in dealing with social evolution that the biological analogies, in order to be applicable, must be greatly modified. This is even more the case when we come to deal with such a topic as social *heredity*. We found that social evolution is indirectly influenced by biological evolution. But social heredity breaks away almost wholly from the biological analogy. It is purely superorganic in its character. How, then, are social results made permanent? In the first place, there is no evidence that any permanent increase is effected in the native capacity of the mind of the individual. We cannot say that the intellectual or social capacity of the modern infant is any greater than was that of the ancient. Again, in social heredity there is no question of the inheritance of congenital or acquired characters. The social capacity with which an individual is born into the world may be regarded as a constant, while the acquisitions of the individual perish with him and would be lost were not social heredity different from the principle of biological inheritance. Now, in determining what social heredity is we may say that there is no such thing as subjective social heredity. It is purely objective. Where, then, do we find it? Nowhere else than in the body of culture that is contained in our literature, our institutions, our laws and customs, our buildings and architecture, our science and educational facilities which we, as one generation, leave to the generation that follows. The social unit not only inherits its individual nature, but it falls heir also to the stored-up forces of its social environment.

In dealing with the notion of social heredity it will be necessary, in the first place, to distinguish it from the social environment. The whole outward situation of the social unit is made up of two elements, (1) the social individuals of the group and the group itself with its present communal activities, (2) an inherited body of institutions,

customs, ideas and instruments of culture, that has come down from former generations. The former is the environment proper with which the social unit immediately interacts. The latter is its heredity, what it becomes possessed of by inheritance. There can be no ground for dispute between Lamarckian and Weismannian here, for each generation may add to the inheritance, and what it hands down will be composed of its own patrimony *plus* what it has added by its own efforts. Only, there is this great difference; a generation may squander its social patrimony so that it will have less to transmit than it received. And again, the new generation may fail to enter into its hereditary rights. These special features are due in part to the nature and scope of *social selection*. This is a conscious function, as we have seen, and furthermore, each generation exercises it not simply in the field of variations, but also in connection with its social inheritance. To a great extent, at least, the social patrimony is optative. Only that part of it will be saved and transmitted that is selected and becomes vital in the life of the new generation. Otherwise the world would still possess the Alexandrian library and the historian would be much richer in materials. They are also due in part to the *method* by which a generation possesses itself of its patrimony. If we distinguish the social patrimony from the environment proper, then it will be found that the whole hereditary endowment may be subsumed under the head of the instruments of culture, and that they can be made available only through the educative function. The primary office of education is that of inducting the social units into the rights of their social patrimony. Only when they have thus caught up with their heredity can they become producers and add to the fortune they have inherited.

At the close of this chapter we wish to devote a paragraph to the continuity and direction of social progress. We have seen that the conditions of progress are (1) the power of accommodation possessed by the community, (2)

some individual who proposes a variation that succeeds in having itself selected. As to continuity, that might seem to be impossible where each generation has so large an option with reference to its patrimony. There is a circumstance, however, which renders the option less important in this respect than it seems to be on its face, and that is the fact that the generations are not like so many lengths of a rope each following the other. They overlap to a great extent. The life of a generation represents not the whole duration of the life of its members, but only that part of it which the average member lives beyond the period when the life of the average member of the preceding generation ceases. As a matter of fact his life has been overlapped during the whole period of his youth by that of the parent generation. And this is precisely the educative period of his experience. We may define education in this regard as *the means by which a passing generation incorporates the vital elements of its own culture into the life of the generation that follows.* When we bear in mind that in civilized communities about one-fourth, and that the most susceptible part, of the whole natural life of the individual is given over to the process of education, its vast importance will be apparent. This alone might seem to provide a sufficient guarantee of continuity. But we may borrow an analogy from biology and add to the force of education that of the substantial identity of all social tissue. By social tissue we mean, of course, the social nature of man which we have found to be a common nature and to involve uniform modes of reaction. This community of nature would doubtless bring about a certain degree of continuity from generation to generation, even apart from the influence of education. But it is not necessary to attempt a separate valuation of the forces inasmuch as they always act in concert and are found to be sufficient to secure the degree of continuity necessary to social progress.

That the normal direction of social progress will be in the line of greater complexity need not be argued. The

development of organ and function will involve the processes of differentiation and integration; the separation of functions will be accompanied by more compact and efficient organization. Mr. Spencer has insisted on this almost to the verge of tedium. Less attention has been paid, however, to the problem on its subjective side. Here it is a question of the progress of social motives. We have seen that sociality is at first largely, if not exclusively, a function of spontaneity. But the tendency of sociality is toward a reflective stage, or at least toward a stage in which spontaneity will be qualified by reflection. When men begin to think, they begin also to act deliberately from motives which arise in reflection. It thus becomes possible to inhibit impulse by the motives of deliberation. Reflection operates by simply enlarging the situation upon which the social forces react. In spontaneity the social units react egoistically and altruistically according to their nature. But in reflection the larger situation presented is able to impose its inhibitory veto on the impulse of spontaneity. The natural man thus feels himself under restraint and the possibility of deliberate action arises. Reflection thus accustoms the individual to the operation of restraints, and this prepares the way for the introduction of the higher motives of ethics and religion. The law of social progress in the sphere of motive may be defined, then, as a tendency to pass from a stage of spontaneity in which action proceeds from impulse to a stage of reflection in which it becomes possible to postpone impulse and to act from motives arising out of a broader view of the social situation.

CHAPTER VIII.

THE SOCIAL SYNTHESIS.

In the preceding chapters we have been endeavoring to determine what we may call the concepts of sociality. If we take the representation as a whole, as it has been worked out in these chapters, it resolves itself into two leading concepts; (1) that of a social situation, (2) that of a social process. The situation is resolvable, in the last analysis, into a plurality of socially endowed units aggregated into a community and developing forms of social reaction. The fundamental relation of these units in this community is that of interaction. The interactions of the social units give rise to certain modes of reaction called social, and of these the modes that receive the stamp of publicity and are selected, constitute forms of communal activity. It is thus that social functions arise, and these lead to the development of organs appropriate to their exercise. Thus arise the institutions of society. The social process is this activity of social organization conceived as a progressive movement in time. It takes the form of social evolution manifesting the phases of habit and accommodation, selection and hereditary transmission. In its form it exhibits the stages of a development from simplicity to complexity, of organ and function and also a tendency upward from the level of pure spontaneity to that of reflection and deliberation.

Let us now return from our analytic endeavor and take

a view of the situation as it presents itself in the concrete. To the social investigator who has gone through the preliminary analysis necessary to determine the concepts of his science, the concrete situation will present itself about as follows. He will find a social community or groups of social communities that he knows by analysis are resolvable into pluralities of social units in interaction, manifesting the phenomena of common activities and these taking the form of progressive movements in time. He will thus be the spectator of progressive social movements and his analysis will have enabled him to connect these with the individual and communal forces which bring them into effect. And his business as an investigator will be to study the social movements or phenomena in connection with the underlying forces which produce them. How far, then, will he be able to deal with his phenomena under the rubrics of a natural science; and if there be a natural science of social phenomena, to what extent will it involve a modification of the concepts of science as they apply to physics and biology? At the outset of such an inquiry we must not forget the fundamental doctrine of this whole treatise; namely, that the phenomena we deal with in any field are symbolic effects of the operation of underlying and more fundamental forces. The social movements must be regarded as functions of the individual and communal forces which underlie them. Now we have found that the fundamental concept of natural science and that which determines its view of the world is that of a system of phenomena dynamically connected with underlying substances or grounds. The dynamic principle by means of which phenomena are thus related is natural causation.

In dealing with the application of this principle to biological phenomena we found that the internal instability of the biological units precluded quantitative exactness and rendered only a qualitative determination possible. Again we saw that the developing character of biological

phenomena made it necessary to apply the principle genetically rather than logically. At this point we found some good authorities denying the applicability of the principle of natural causation to genetic processes. We saw, however, that the principle when stated with sufficient breadth is not open to the objections urged. The sociological investigator will find that it is the genetic form of causation which he will have to employ. Let us get our ideas clear, then, as to what the genetic notion of causation is. The principle of natural causation is that of the dependence of the phenomenal effect on natural conditions. That the cause shall be adequate to the effect,—that is, sufficient to account for its natural rise,—is a universal requirement. But that the effect shall be identical with, or the equivalent of, its cause is a quantitative requirement that is vital in physics but not applicable where quantification is not attainable. Abstracting this requirement of quantity the qualitative requirement which remains is simply that the cause assigned be a sufficient statement of the natural conditions out of which the phenomenon has emerged. This requirement will be met by the genetic judgment $a=b$ in which the equality sign signifies *becomes*. If this judgment be anything more than a mere descriptive one stating a fact, that is, if it be explanatory, then a will represent the conditions out of which b naturally arises, so that our judgment may be stated as follows: given a then b will arise. Here the given term a is the natural causal condition of the rise of b.

If we once become clear on this point it will become obvious that natural causation is the principle of explanation throughout the realm of natural science, and that where it breaks down, there natural science comes to an end. If, then, sociology as a natural science be a science of natural causation, it is open to ask whether the difference between social and biological material may not make a further modification in the form of its application necessary. We are prepared to answer this question in the

affirmative. The question how far, if at all, consciousness shall be recognized as a biological factor, is yet in debate. At all events even though consciousness in the form of purpose should be admitted, it could never be carried so far as to impose on biology a purposive principle of explanation. In other words, biology would still remain a natural science and would not be under the necessity of substituting the principle of finality for that of efficiency. The presence of consciousness as a social factor is, however, beyond debate. Not only does consciousness enter as a factor, but it has practically the whole field to itself. The social agents are conscious units. The social forces are conscious and act from conscious motives. The social movements are the phenomena of conscious causes. Why, then, does social movement not fall wholly outside of the category of natural causation, into that of finality? The answer will appear from various lines of consideration. In the first place, it is the exceptional social movement that is altogether, or even in the main, the result of prevision and purpose. The majority of social movements, and we may say, those that are most typical and representative, are the result of a plurality of forces in which prevision and purpose are generally to be included. But in the case of these movements it will be found that the forces of spontaneity enter to such an extent as to take the movement as a whole practically out of the sphere of prevision and purpose. The case of the late Spanish War may be taken, I think, as a typical example. No one at the beginning of that war could have possibly foreseen the complete revolution in international relations which it was to bring about. No one could have anticipated the most vital consequences of the war, the painful complications fallen into by a species of accident, the result of which has been a profound revolution in national sentiment and in the policy of the country. No one, I say, could have anticipated this. A few gifted minds may have had some inkling of the result as a bare possibility, but how much

had this to do with bringing about the result? Such causes were ten thousand times outweighed by the blowing up of the Maine and the spontaneous explosion of sentiment to which it gave rise. It is only when a Bismarck stands at the head of affairs and deliberately plans revolutions years before they are effected that we have a social movement that clearly transcends the category of natural causation. In this case while natural causes co-operate, the dominating and determining force is the will and purpose of a great mind.

Approaching the problem from another point of view, it is the case in general that social movements arise indirectly out of the interactions of the social forces. The individual purposes, so far as these exist, must come into interplay with the purposes of other individuals, and only those will be selected which succeed to the stamp of publicity. Now the purpose that receives the public stamp may not be that of any single individual. The individual purposes may all have failed and the purpose that succeeds may be like the sand that constitutes the social medium, truly communal, but not the function of any of the social pebbles that form the social group. If we add to this the tendency of communities to be more completely under the control of impulse than are individuals, and the consequent greater dominance of spontaneous movements in the social medium, it will be clear, I think, that the ordinary social movement will not be one that is mainly determined by prevision and purpose.

But while this is true, it must also be admitted that the wills and purposes of the social units play a very important part in the social drama. They are the counters, so to speak, whose rubbing together exercises an important influence in the development of the communal consciousness and forms of communal action. We saw that the instability of the biological unit rendered the application of quantitative methods in biology impracticable. The presence of consciousness in the social unit with its mingling

of spontaneity and reflection renders the unit of sociology still more unstable than that of biology. Consequently the sociologist will be unable to reach results which will be at all commensurate in accuracy with those of the biologist. The biologist may by experimentation overcome to some extent the instability of his material, but the scope for scientifically exact social experiment is necessarily very circumscribed. Yet, if we allow the widest scope to this instability, the student of social movements will find that they are still calculable and that the principle that brings them within the limits of social explanation is one that connects them with their natural conditions. The possibility of a natural science of social phenomena depends on the availability of judgments of the genetic type which connect social antecedents with social consequents in such a way that the subject of the judgment *a* states the natural conditions which, when given, account for the rise of *b*.

But in saying that sociology may be a natural science, we do not wish to be understood as claiming that social movements may not rise above the limits of natural science. Our belief is just the contrary, that there is a tendency in the sphere of social activity to transcend the limits where a natural science treatment would be profitable. It is only in the sphere of spontaneity and the operation of impulsive and unreflecting forces that natural science has a clear field. But the law of social evolution is that of progress from the spontaneous to the more reflective. Now we are prepared to deny that any pure phenomena of reflection can be profitably treated under the rubrics of natural science. For, a movement of reflection, if it be a practical movement, will be one that is determined by reflective motives, that is, by prevision and purpose, and it will have a definitely conceived end as its goal. Such movements fall definitely under the category of finality. There is a tendency in social development toward a point where the motives of reflection shall be dominant. This tendency is exemplified in any well-organized community

whose citizens are exceptionally intelligent and whose social actions are determined by deliberation. Such a community presents phenomena which it would be utterly profitless to attempt to explain by the ordinary rubrics of natural science.

We say, then, that while it is true that social phenomena, taken in the mass, are amenable to the categories of natural science, and while it is no doubt true that natural science supplies the only method by which these phenomena in their more material aspects can be profitably treated, yet the possibility of transcendence is to be found in the very constitution of sociality. There can be no sociality where there is not consciousness. The social unit is a conscious unit. Now, where consciousness is, there is also the possibility of reflection, and just in proportion as the conscious unit becomes reflective and acts from the motives and in the forms of reflection, to that extent also it transcends the limits of natural science and comes within those of finality. The same is true, though to a lesser degree realized, in communities. By virtue of their conscious character the social community has the capacity to rise above the level of spontaneity and to bring its public conduct under the control of the motives of reflection. Where intelligence controls this tends to become the case. We have, then, the phenomenon of a community that in its conduct has passed beyond the limits of natural science into that of prevision and purpose. The conclusion we would draw from the foregoing is that reflection marks the limit at which the method of natural science ceases to be applicable to social movements, and that is as much as to say, that deliberate action, that which is determined by thought and deliberate purpose, is of such a character as to transcend the principle of natural causation. In its application to social movements, however, the conclusion requires several modifications. In the first place, it might be true that all the social units of the groups had reached the stage of reflection and deliberate action and yet the movements of the groups as

a whole might not be dominantly reflective. We have seen that community-action tends in general to be more spontaneous and unreflecting than individual action. Moreover, the common interests which make up the body of social motives have, by virtue of their commonalty, fallen into the category of the *habitual* and are likely to be accompanied with the minimum of reflective consciousness. In general, then, social activity, in practically its whole scope, tends to conform to the laws of the habitual in the individual. Again, it is seldom that a community is found to be, through and through, under the influence of reflective motives. This higher type of public activity will, as a rule, be confined to individuals or to small groups within the larger communal group. And it will only be in some great public crisis, where the necessity for reform has become crying and a campaign of education is entered upon, that the community as a whole will be aroused to thought and reflective action. Furthermore, the control of the reflective social forces will be limited in both space and time. Even the most gifted intelligence is unable to comprehend, much less control, the world-movements as a whole. It is only in history that we can read intelligently the trend of the world-movements. Even the Bismarcks of history are found to have builded either more wisely or more foolishly than they knew. And this is because, however comprehensive and sweeping their purposes may have been, they have been included in a broader, uncomprehended sweep that has led on to unanticipated things.

For the above reasons it will be found true generally that social movements will be open to the methods of natural science. The movements that rise above the limit will prove exceptional, and even these exceptional movements will be found to be included in the broader sweep of forces which completely transcend the limits of foresight and purpose possessed by the most gifted statesman or seer.

What place and function shall we assign, then, to the reflective forces in the social scheme? The pure phenomenal-

ist will tell us that these are mere bubbles on the surface and have no influence. The hide-bound fatalist will tell us, on the other hand, that everything has been predetermined by the inevitable working out of material forces and that reflection is simply an accompaniment of the process rather than an agent. If, however, we stand by the fundamental doctrine of this whole treatise, we shall be neither pure phenomenalists nor hide-bound fatalists. We have found that consciousness is teleological in its very constitution and that it is only the stage of its spontaneous activity that is completely open to the method of natural science. Reflection which translates the movements of consciousness into terms of thought and deliberate purpose, by virtue of this, lifts it also above the limit of natural science determination. We have seen, however, that the very nature and scope of social movements are sufficient to keep them bodily and forever in the sphere of spontaneity, where at least the controlling forces will transcend the thoughts and purposes of the actors. The logic of the situation is on the face of it disheartening in the extreme. It looks as though the pure phenomenalist and the hide-bound fatalist were after all in the right.

But let us not make haste. We have been forgetting something of importance. Whether we be libertarians or determinists, we shall at least recognize the fact that our thoughts and purposes are free in the sense of not being strictly bound to the car of habit. We are able to think and resolve the new and untried; that is, we are capable of *reflective variation*. May it not be, then, that reflection finds its true office, socially speaking, in this business of variation? We have seen that the social group is not only selective, taking simply the variation that will fit in some way into its habitual life, but that it possesses also the power of accommodation. It may assimilate the new and adapt itself to it. Shall we not say, then, that the great business of the reflective forces is to *suggest* variations? And inasmuch as reflection is itself a selective activity and is only

satisfied with the best, shall we not say that the variations it proposes tend to take the form of *social ideals?* When we think of it, can there be any real social progress without ideals? Will it not otherwise prove haphazard and run to waste? We find, then, that so far are the reflective social forces from being impotent and useless, that they are the fruitful and indispensable sources of social ideals. They supply the social consciousness with eyes through which it is able to see that which never 'was on land or sea.' They are thus indispensable conditions of social progress.

Now, it is in this phase of them that the movements of society tend always to transcend the methods of natural science. The spontaneous forward-impelling forces of society may be estimated in terms of natural causation. But what value has such a principle in determining the force of an ideal? In its very nature an ideal is teleological and final. It attracts rather than impels, and its whole force depends on its first having been thought or conceived, and, secondly, on its being elevated into a purpose of action. It then becomes a principle of conduct and inspires practical activity.

We may conclude this part of our discussion, then, by saying that while the tendency of reflection is to lift the social movements as a whole out of the category of natural causation and bring them under that of teleology and purpose, yet as a matter of fact owing to causes that have already been pointed out, this tendency never, except in isolated and restricted instances, realizes itself in fact. Social movements as a whole will always be amenable to the methods of natural science. But while this is true, reflection is not by any means abortive, but it is its function to supply those social ideals without which social progress would be impossible. On their ideal side, then, social movements are functions of reflection and are no longer amenable to the methods of natural science. The wise student of social science will recognize the fact, therefore, that his data possess an aspect of transcendence.

Now, it is through the medium of these social ideals that the synthesis between *social science* and *metaphysics* is to be effected. We have seen how inevitable and how indispensable the social ideals are. No social progress would be possible without them. Let us ask here why this is so. The answer will be found in the fact that sociality is a function of consciousness; every social movement is a conscious movement. But all conscious movements that lead to any fruitful results are mediated by cognition. There must be "the self-thought-situation" as a copy and guide of activity. This is especially true in social matters where the copy is necessary in order to bring the social other within the limits of our own consciousness. Cognition is necessary, then, as a constituent of social activity. And it is clear that cognition will be the suggesting source of variation in the sphere of spontaneous social activity: that, in short, it will present the ideals which the spontaneous forces will either select or suppress. But a conscious ideal is more than a cognitive suggestion that has been spontaneously selected. A conscious ideal is a product of thought and deliberate choice. And thought is reflective rather than merely cognitive because it has as its norm some standard of perfection. There can be no reflective thinking without the presence of an intellectual ideal, a norm of theoretic perfection, just as there can be no deliberate purpose apart from some norm of practical perfection. Now, social reflection is thought and purpose coalescing on some reflected situation which will, therefore, represent an ideal, and as such will inspire the forces of its realization. When the social consciousness has once reached the stage of reflective activity it will be universally true that it will have no other fruitful ideals than those that are supplied in the ideals of reflection. To eliminate these would be to bring social progress to a standstill at the point where it is passing out of the stage of mere habit into that of fruitful accommodation. Sociality would then mean a dead level of monotonous spontaneity.

This is equivalent to saying, however, that sociology will cease at a certain point to be a *natural science* and will become a science of *final causes*. And there seems to be no help for this. The mere presence of thoughts and purposes among the conditions of special phenomena is not inconsistent, as we have seen, with the application of natural science methods. But when these thoughts and purposes take the form of social ideals, as they inevitably will, and in so far as they act the part of ideals, they become forces not of efficiency but rather of finality. Their operation is teleological rather than mechanical and cannot be estimated in terms of natural causation. Natural science thus proves the fragmentary character of its method as a way of dealing with social phenomena. In order to render its own field intelligible it must recognize the function of social ideals, whereas these can be fruitfully dealt with only by a method that transcends its own. And the method which thus becomes supplementary to that of natural science is no other than the method of metaphysics in a special form of its application. For metaphysics, in view of its method at least, may be called teleological science, and consequently wherever science is obliged to become teleological it is obliged to become metaphysical. Such a conclusion may be maddening to those who entertain a phobia for metaphysics of any kind, but I fail to see how it can be avoided.

The further metaphysical implications of the social consciousness will arise mainly in two different quarters. In the first place, if we follow the clue supplied by the social ideal we shall be led to recognize the fundamental place which the *individual* holds in the social economy. If we consider the whole business of social ideals we shall find that in no case is the initiative in social progress ever taken by society or the social group as a whole. The initiative is invariably the function of an individual or a small group of individuals to whom the new suggestion has concurrently occurred. Not only must the suggestion come to the individual, but the individual must also conceive it in its social

form. It must be a variation, in other words, which is fit for social use and which society may select if it sees proper to do so. The originator and proposer of the innovation will, therefore, be a social individual, and his innovation will take the form not only of a proposed novelty but of one that is in the line of progress. It will embody a social ideal. All this is an individual function and it gives the individual the primacy in the social community. Moreover, our analysis has shown how essential the social individual is to the social community. The units of society must be social units, and it is only by virtue of the social character of the units that in their interaction they found society and not a mere aggregation. We have seen that there are certain forms of social action which are immediate functions of the community as a whole and not of the individuals. But even here further reflection will lead to the conclusion that, in the last analysis, the sources of these communal forms are individual. For when we think of it, we cannot doubt that there is no such thing as a community-consciousness except as it is borne by individual members of the community. That being the case, the common social interests that prompt community-action will exist only in the consciousness of the individual members of the community. And the common movements that arise in response will be resolvable into concurrent movements of individuals. What makes the commonalty, in the last analysis, is the fact that the interest or movement is a possession or function of every member of the community. If, now, social communities are, in the last analysis, resolvable into individual agents, and if it be the prerogative of the individual not only to supply the common motives of social action, but also those ideals without which social progress is impossible, *the primacy of the individual becomes apparent.*

The primacy of the individual in social organization and progress will supply an important datum to the question as to which is to be regarded as the more real, the

individual or the social organism. There is an important sense, of course, in which the two terms are inseparable. Without the individuals there could be no organism, and without the organism the individuals would at least fail of the greater part of their development. But if we put the question, Which is the more real in the order of existence? then clearly the answer would be in favor of the individual. Society is resolvable into a plurality of existent social units and besides these there are no other existents. Society itself is a function of the community of these individual existents. Moreover, we have found that society has no consciousness apart from the individual consciousness in which social motives are responded to. And the forms of social movement are resolvable into the concurrent movements of the social units. Furthermore, it has been found that social progress is an individual prerogative, since variations are never proposed by society as a whole, but by some innovating individual. And when society wishes to hand down its possessions as a patrimony to later societies, it can do so only by translating that patrimony through education into individual possessions. In the light of this let us put the question, Is the individual for society or is society for the individual? Here again we find it true that the situation does not present a real disjunction. The individual is for society since the public welfare will present the highest practical object of individual endeavor and the social ideal will supply the highest common goal of action. In the whole sphere of public activity the individual must regard himself as a servant and must subordinate his personal interest to that of the public. And when the welfare of the public demands it, he is required to give up his most cherished possessions and sacrifice even life itself in its defense. Moreover, the life of the individual is transient and the social organism supplies him with the only medium through which he can hope to prolong his memory or his influence beyond the period of his own life. On the other hand, society is just as clearly for the individual. When

it wishes any of its interests conserved its appeal must be to the individual. Its whole resources must be turned into the means of his education, and upon the results of this education will hang the questions whether the social organism shall be maintained or suffered to degenerate, and whether any progress shall be made in advance of current ideals.

When both sides have been argued to a conclusion there remains the question, however, which of these terms shall be regarded *ultimately* as the more real and as, therefore, supplying an end in itself for the other. When the question is put in this form we are prepared to take the ground that the individual supplies the only ultimate end of social activity. If the individual is not the end, then there must be some more ultimate end to which he is a means. Now it is to be understood in the debate on this question that we are not considering the relation of one individual to other individuals or to the community of individuals of which the state, for example, is comprised. Rather, the point of distinction here is between the individuals comprising the state and their interests, and some abstract interest or ideal of the whole apart from the interests and ideals of its individual members. I know that I am on debatable ground here and that the position developed will be open to the charge of individualism. But I contend that there is a true as well as a false individualism, and what I conceive to be the true individualism is a doctrine that plants itself squarely on the proposition that the state, and here I take the state to represent society as a whole, can have no legitimate interests and aims which are not tributary to the interests and welfare of its individual citizens. The prime test of all measures of state policy will thus be found in their bearing on the welfare of the citizens of the state. If the measures, however desirable they may seem in themselves, are likely to debauch the morals of the people or to promote ideals of citizenship which will be bad for the individuals of a community, then

they should be set aside as representing bad statesmanship. From one point of view, the whole duty of the state consists in the education of its citizens. From another point of view, its duty is their defense. From still another, its duty is to conserve their material prosperity. When it has done these things, with due regard, of course, to international relations, it has performed its whole legitimate duty. Moreover, whenever statecraft sets up any other goal than this for state action it is following a false ideal that will be sure to lead to pernicious results.

The social organism is not an end in itself. It is, in the last analysis, a function of individuals in social interaction and it exists as a means for the development of the individual's life. When society has supplied the wants of its individual members, when it has educated them up to the limit of its facilities, when it has provided the means for the development of their intellectual and aesthetic capacities, as well as the instruments of their moral and spiritual culture; when it has done all these things and many others which the growing social consciousness of the individual requires, it will then have performed its whole legitimate duty. But in all this the social organism is plainly instrumental to the interests and welfare of the individuals. Should it set itself up, however, as something in itself, having the right to coerce individuals to its own ends, it would thereby become a monster which finds its satisfaction in swallowing its own children. The final view of society which we thus reach is that of a plurality of social individuals who, following their social nature, or instincts if we prefer the word, organize into forms of communal action and develop the organs necessary to carry these forward. The primary forces in the constitution, development and conservation, of the social organism are individual. The individual supplies the ideals of social progress, and the interest and welfare of the individuals supply a criterion of the legitimate aims of the social order.

We conclude, then, that society is, in the last analysis,

for the individual, and subsidiary to the interests and aims of his life. The metaphysical bearing of this result will be obvious if we carry the reasoning a step farther and conclude that, if society be subordinate to the individual, then it is possible for the individual to develop needs and ideals for which the social order will provide no adequate satisfaction. The individual may become conscious of being the bearer of interests and ideas that are *ultra*-social; or at least *ultra* to the social order as it realizes itself in his present temporal experience. He may become the bearer of ethical and religious interests and ideals which by their very nature will not fit completely into this temporal order or allow the individual to be satisfied with the limits which it sets to his life-perspective and his aspirations. In short, it is possible that the social organism is only an instrument which the nature of man develops as a means of realizing his ordinary temporal welfare, while there may be other deeper interests and potencies in his nature the normal satisfaction of which requires a broader horizon than that of the temporal social life, as well as the operation of motives that, in some essential respects at least, will be ultra-social. We do not enlarge on this consideration here. But it will be found to have vital importance if, in the further advance which we are about to make into the territory of ethics and religion, it should be found that man, by virtue of his moral and religious consciousness, does become the bearer of interests and ideals which may properly be called ultra-social.

But the metaphysical implications of the social have not yet been completely exhausted. The metaphysical interest is satisfied only when some ground of *final unification* is reached. Now, we have seen that what we call the social consciousness is, in the last analysis, a function of the social individual. The common consciousness is simply an instrument or means of common action which the members of the community develop out of their interactions. It has no potency in itself and is capable of developing no real

unifying principle. In short, the common consciousness has reality only as it is resolvable into the concurrent consciousnesses of a plurality of individuals. It is nothing, then, that can supply a real objective principle of unification. Moreover, we have seen how the reflective consciousness, which does supply norms of unification in its thoughts and ideals, is never able to impose these on world-movements as a whole. It is only on fragments of movements, and then only partially, that the unity of the ideal can be imposed. The special purposes and ideals of human reflection are swallowed up in the movements as wholes, so that the world-movements in the social sphere must be supposed to go on without guidance from the reflective agencies of the individuals of which they are composed. But we have seen that the ideals of reflection are the only means of social progress. They constitute the variations which, when selected by the consciousness of the group, become the motives and guides of progressive action. When, however, we come to the world-movements, we find that this instrument of progress is of no avail. The world-movements transcend and defy the ideals and guidance of all human agents. Is it possible, then, that in the last analysis the social world as a whole has been left without guidance or ideals?—that in the highest court, the supreme tribunal before which all issues are finally tried, accident reigns supreme, and that no better justification for any general result can be given than that it has so chanced to turn out?

We reach a point here where we are threatened with the destruction of all social values. The whole social order is on the brink of chaos and about to topple over. Now, it is no fanciful sketch that we are drawing here. The truth is, our social study brings us into the presence of the real point of issue between those who feel the necessity of reaching some metaphysical principle of unity and those who either do not feel such necessity, or at least do not admit its validity. Without arguing the question here we wish simply to state the case in favor of the metaphysical

alternative. We seem to have reached one of those critical points where it becomes necessary to decide between two radically different ways of looking at the world. The one is that of the mind which is seeking everywhere for rational and intelligible design and will not rest satisfied with any explanation that does not reduce its world as a whole to terms of rational order. The other way of looking at the world is one that regards its order, so far as order may prevail, as a phenomenon, a result, that has no reason which is traceable, in the nature of things. The world-order is just there like any other fact, and if it breaks down at some point, or in fact at all points when pushed far enough, why that is simply another fact to be accepted. We might call one view of the world the rational, the other the simple factual. Between these two views it seems to me one must choose at the outset and with full consciousness of what it implies. Now it is clear that the whole metaphysical construction of the world proceeds on the primary choice of the rational rather than the simple factual alternative. It is not satisfied with any doctrine that cannot be shown to be ultimately rational, and it is in accordance with this very demand for ultimate rationality that the social situation which we have pointed out above cannot be accepted as final.

We come, then, to what we may term the *final social synthesis*. The limit of natural science in the treatment of social phenomena has already been determined. Sociology will be a natural science up to the point where the principle of natural causation loses its explanatory value. We have seen that this point is reached in connection with the development and function of social ideals. This is the work of the reflective consciousness operating under the categories of thought and purpose. The principle of reflection is not natural causation but finality. Reflective movements are teleological in their form and principle. A synthesis of natural causation and finality thus takes place at the very heart of sociology, lifting it in some respects

out of the category of natural science. Let us assume this synthesis, however, and set it to the credit of science; we are thus brought up to the point where a final synthesis is seen to be necessary. Its need arises, as we have seen, out of the exigencies of the social world as a whole. Notwithstanding the function that is performed by the thought and purpose of individual social agents, the social movements as a whole transcend their guiding power and in their largeness seem to be without purpose or design. Shall the social world as a whole be left a prey to accident and blind fate? We have seen how, in meeting this issue, a man may choose to be either a rationalist or a pure factualist. He must, however, accept the logic of his alternative. If he chooses to be a pure factualist he must bear in mind that this involves the giving up of all rational explanation. As a pure factualist he must be a pure phenomenalist in his science as well as in his philosophy. Now, pure phenomenalism in science means an empiricism which confines itself rigidly to mere descriptive generalization and refuses to connect it with causation or any other principle of deeper grounding. Pure phenomenalism cuts science in two very sharply at the point where Bosanquet draws the distinction in his logic between description and explanatory theory. The factualist is logically debarred from any theory of the world. He must eschew theory altogether, for that is explanation and goes beyond the fact. And he must cultivate, on the intellectual side, exclusively the faculty of observation, while reflection must be put to sleep. If the factualist be not satisfied with this he is no true factualist, but very likely a rationalist in disguise.

At all events, there is no other real alternative between seeking some form of rational construction and refusing to theorize our world at all. If we are not ready to espouse the radical position of the pure factualist with its unblinking logic, we shall then be amenable to all the motives of rational explanation. And just as in view of the results of

science in the fields of physics and biology, we found it necessary, in order to reach a completely rational construction, to effect a synthesis between natural causation and teleology in which the whole sphere of reality is finally grounded in a unitary thought and purpose and so redeemed from accident and chaos, so here a final view of the social world reveals the need of the same kind of synthesis. The social consciousness supplies no principles of final unification. The social world as a whole is thus left to accident and blind fate, *unless we rise to a final synthesis in which the world-movements as a whole are conceived as organized and guided under an all-comprehending thought and purpose.* This thought and purpose would not be identical with the common thoughts and purposes of the social groups; nor yet with a generalization of these, for we have seen that these are of no avail for the whole and that generalization is only abstraction. The final metaphysical implication of sociology seems to point to an eternal consciousness in which the world-movements as a whole are conceived and purposively directed to a unitary end.

At this stage in our investigation we may well pause a while and take stock (to use a commercial phrase) of what we have already accomplished. The aim of the whole discussion has been to vindicate the right of mechanical science in its own field and yet to prove its inadequacy as an interpretation of the world. The forces and material things of our experience are real, but they are not the whole of reality. The great crux of any world-theory arises in connection with the problem of the relative claims of matter and mind. We have seen how the establishment of the primacy of mind was the object of the great Copernican revolution, effected in the world of thought by Immanuel Kant, a revolution the full significance of which is only dawning upon the world very slowly even now after the lapse of a century. The situation may be very simply

stated as follows: If the world is to mean anything more than a bare appearance, it can mean this only to some conscious intelligence that asks the question. And the question will be prompted by the demand that reality shall be more than what appears. If what appears does not satisfy the conscious propounder of the question, it is because there is something lying back in the nature of what appears that is not expressed in the appearance. And the conscious propounder finds nothing in mere appearance because he does not find himself there or what is akin to himself. This is the secret of the whole movement of science and metaphysics in their effort to interpret the world. We learn in experience and in our scientific activities how the world-appearance must suffer itself to be overhauled and reduced to a phenomenon of that which does not appear but is assumed to be more real than itself. Thus the world of physical science arises, a dual world of grounds and phenomena, the appearances of which are grounded in and through the principle of natural causation so that, under the categories of cause, substance and interaction, the presented world becomes the manifestation of a dynamic world of agency which takes on the mechanical form and embodies its meaning for knowledge in the judgments of science. Let us not forget, however, that we do not *perceive* this world of mechanical categories. No man ever *saw* matter or energy. We affirm it in a judgment that has its first and deepest source in the subjective demand that reality shall be more than appearance; and more in these very definite senses; first, that it shall be more stable and persistent; second, that it shall take the form of an activity in some sense analogous to the subject's own. This latter presumption is the primal spring out of which the whole effort of science to reach an explanation of its world arises. The effort takes on the mechanical form, as we have seen, by virtue of the fact that it takes its departure from the outer standpoint of perception, and deals in the descriptive formulæ of observation. From this point of view, accord-

ing to a process which we have followed out in detail, the mechanical construction of science develops and the nature of reality is defined so far as it can be, in terms of natural causation. But the same motive that leads to the mechanical interpretation of science also makes it impossible to rest satisfied with the world conceived as a mechanism. Let us bear in mind that mechanism is itself the result of an effort of man's conscious intelligence to find some thing deeper in the world than mere appearance. But the same intelligence refuses to be finally satisfied with mechanism. The conscious activity that wells up in man is self-initiative and living; it is previsive, purposive and end-seeking. It is an activity in which the end realized is conceived in idea and attained through the mediation of purpose. The further step of world-interpretation which we call metaphysical, therefore, is motived, as was the mechanical, by a demand that the world at its heart shall be found akin to the beating heart of the intelligent thing that seeks to realize it. This is the secret of the process we have been following out in the preceding chapters, a process in which it becomes apparent that natural science in all its fields, if pursued profoundly enough, will lead to a point where it will be made clear that, in order to reach a final interpretation, we must make the passage from mechanism to purpose.

Finally, the same motive that leads to the synthesis in which mechanism is conserved and at the same time transcended by its passage into purpose, also requires that the synthesis shall be generalized into a principle for the whole as well as for individuals and parts. It is clear enough on reflection that a principle of this nature must apply to the whole or it loses all its value for details. Hence, when the problem arises, as it must, of the destiny of the individual in so far as it transcends the social organism; or, when the problem of the meaning of history as a whole, which in its range transcends the widest scope of individual and finite purposes, becomes pressing; the same motive that led

to the subordination of mechanism to purpose, will lead here to the final reference of the world-movement as a whole to the synthetic grasp of an all-comprehending purpose. Now, an all-comprehending purpose is a form of agency which can be exercised only by consciousness that is able to relate itself in like manner to every part of the real, and, therefore, to *reality as a whole*. Some *eternal consciousness* that shall be the adequate bearer of an all-comprehending purpose, seems, therefore, to be the last postulate of metaphysics.

PART II

SYNTHESIS

DIVISION B

FROM SOCIALITY TO RELIGION

CHAPTER I.

ETHICAL ACTIVITIES.

In treating of the ethical activities of man, the first question that comes up in this connection is that of the relation of the ethical to the social. In a very important respect man's ethical experience will appear to be an aspect of his broader social experiences. Now, we have seen that the whole of the social is a manifestation of consciousness. We have also had occasion to distinguish between the spontaneous and reflective social activities, and have found that to the reflective consciousness, taking the form of thought and purpose, is due the ideals of social progress. While it is true in general that the law of habit operates universally in the field of social products, reducing them to customary and traditional forms, yet in the sphere of social functions, habit shares the field with accommodation and in *reflection* we have a higher form of *accommodation*. It is only the reflective consciousness, moreover, that is sufficiently free from the bondage of habit and tradition to perform the function of real initiative by conceiving new fields for the exercise of the accommodating activity.

Now, the ethical as a phase of sociality is not only a function of consciousness, but, more especially, of the reflective consciousness. Man can act socially below the level of reflection, but it is difficult to conceive how he could act ethically until he had formed in his consciousness the notion of some ideal or standard of action. The very notion

of an ethical motive is that of a force which comes in to *inhibit* impulse; or at least to lay down the law to it by placing before consciousness a consideration that involves the subordination of impulse to a superimposed standard. This character the ethical will share with other motives of a reflective character; for it cannot be maintained that the ethical exhausts the whole sphere of reflective activity. There may be ethically indifferent motives for the postponement of impulse or spontaneous desire, such as prudence, thrift or ambition. What is claimed here is that the ethical belongs to the genus reflective and is possible only to a consciousness that has begun to think. Now we have seen that the principle function of reflection in the social movement is that of conceiving and proposing new social arrangements which we have called variations, the question whether these be selected or rejected depending ultimately on whether they can be fitted into the general scheme of social accommodation. In case the proposed innovation succeeds in getting itself selected it takes its place as an ideal aim of social activity.

If, then, we represent the general function of social reflection as that of supplying ideals of social action, how shall we characterize the ethical in order to distinguish it from other forms of social ideals? It will not be sufficient to say that the ethical is practical and directs to the attainment of some good. So are the other social ideals practical and they also point to some good. Moreover, we cannot say that its distinctive feature lies in the fact that it is an ideal, that is, the notion of what is to *become* but as yet *is* not. All ideals possess this character in common, and it simply indicates that there is as yet something desirable that is conceivable but not as yet actual. The differentia of the ethical must lie either in the special content of the ideal or in the way it relates itself to the consciousness of the individual or the community. Now it is possible that there may be differences of both content and mode and this will come up for later consideration. But here we are

prepared only to take account of the latter. There is a difference between the mode of the ethical and that of the non-ethical which may be expressed as follows. The non-ethical may impose itself by virtue of a physical necessity so that we may feel constrained to yield to it against our will; or it may impose itself with a logical necessity so that we see that it goes whether we will it or not. But the truly ethical differs from both of these by virtue of the fact that it imposes its authority on the will through the *assent* of the will itself. By the will I mean here that whole practical agency by which a conscious being realizes the ends of its life. Kant called it practical reason, a term that has the merit of emphasizing the fact that ethics is a distinctive product of the reflective consciousness.

Now it is clear that in the species of authoritativeness, by virtue of which the will itself feels the ideal of conduct presented to be necessary and binding, we have the formal differentia of the ethical. And it is in view of this special characteristic of the ethical that we propose to consider as our second problem, how far the ethical can be regarded as a phase or product of sociality. That ethics arises out of social soil and that it is in large part social, are not here in dispute. We are interested in the question whether the claim of sociality may be made exclusive or whether ethics may not possess ultra-social aspects. There is only one way of determining such a question and that is by submitting the basal concepts of ethics to analysis. This we now proceed to do. The question as to what constitute the most fundamental notions in ethics is one that is not very difficult to answer. Aside from the notion of *ought, obligation* or *duty,* which is central, there are the other ground-concepts of *right* and *good* and their opposites. There are, then, at least three fundamental ethical concepts, *obligation, right* and *good.* If we take the notion of obligation or duty, as it is found in the consciousness of the adult, it will not be difficult to analyze it into two elements; (1) the presence of some ideal to the mind

which carries the form and pressure of something that is proposed to be realized, (2) an *assent of will* by virtue of which it becomes obligatory. There never is the pure pressure of obligation from without. It is essential to obligation, and to the sense of obligation, that the assent of will should make the pressure internal rather than external, since through assent the will becomes self-legislating and its own law becomes binding upon itself. There is, however, another aspect of moral obligation which Kant first brought out clearly. Kant distinguished between conditional and unconditional obligation. A conditional obligation is one that depends on a prior choice of will which, however, may be dissolved. The dependent obligation then ceases. For example, if my son wishes to become a civil engineer, he will be obliged to study a certain quantity and kind of mathematics. Let him change his plans, however, and decide on some other vocation that does not involve the mathematics in question. The obligation immediately ceases to exist. Now, the obligation called *moral,* is one that is free from such contingencies and exerts its pressure not simply as an imperative which the will endorses, but as a *categorical* imperative which the will asserts as unconditional and unhypothetical.

The way in which this characteristic of moral obligation works out in practice may be stated as follows. The notion or idea of duty is a universal one, but it is not, therefore, an abstraction. It is an omnipresent term in consciousness which has the peculiar power of turning every situation in life into one in which there is a particular, specific duty to be performed. And the peculiarity of moral experience is that the omnipresent notion of duty does not become active except in special situations where some particular duty is to be performed. Our general moral experience takes the form of a recognition of the fact that there will generally be a duty to be performed. But we do not feel the pressure of the imperative except in concrete instances of duty, and when the concrete situa-

tion arises where the specific duty is to be performed we feel the pressure of the imperative even when wholly unable to determine what particular acts ought to be performed. The pressure is on us to do, even when the particular actions we are to perform are as yet wholly undetermined. We are simply reporting actual moral experience here, and we may go a step further. Not only does the pressure operate where the categories of conduct are empty, but also where a number of conflicting alternatives present themselves. The most painful dilemma of the moral consciousness arises where there is an apparent conflict of duties. Further, when conscience seems to be divided against itself, the real stress of the situation does not arise from the pressure of these alternatives but rather from the necessity we feel ourselves under of coming to some conclusion. This feeling of necessity is the real force of the categorical imperative which tells us that however complicated the situation may be, there is some one thing that ought to be done.

With this report from the court of ordinary experience let us return to the question, how far the ethical can be regarded as a social product. We have seen that the ethical is generically a form of social ideal but that it represents a peculiar species of that ideal. The ethical ideal is one regarding which there is no prior option the resolution of which can render it in any sense conditional. Does this not cut the function of selection up by the roots and render the relation of the ethical ideal to the consciousness of the individual or community wholly unique? We are not ready as yet to answer this question in the affirmative, for it will be remembered that our analysis of obligation has separated it into two parts, the presentation of some ideal of action and the subjective assent of will which is necessary to turn it into obligation. Now, the question arises here whether these two elements of obligation may not be identified with the two social functions with which we are already familiar. May it not

be possible that the objective element in obligation is identical with that function of initiative which is exercised by the thinking activity of the social consciousness, by virtue of which, new situations are conceived? And may it not be also that the assent of will of which we have spoken is the method by which the objective variation is selected and made part of the content of a scheme of duty? It seems clear at least that the ethical moments in obligation arise out of these more general social functions. The situation will be a socially conceived situation and will embody some proposal for action that will stand for a variation; something not only new but also in advance of what is, and standing thus before us as an ideal. Now, below the stage of reflection, in the field of the spontaneous processes, the variation will still arise, mediated by the unreflecting cognitive activity, and the selective act will be performed by the individual or communal consciousness. There, however, it will be a spontaneous reaction in view of the agreeableness or disagreeableness of the "copy" or presentation. The lowest forms of sociality will fall into this spontaneous mold. But as sociality becomes more complex and reflection at last emerges, there will be a development of both terms of the transaction. The objective term will take on the form of a definitely conceived ideal and the subjective selection will take the form of a more complex reaction of satisfaction or dissatisfaction.

Now, as A. E. Tylor points out,[1] satisfaction and dissatisfaction are not to be identified with mere agreeableness or disagreeableness. It is a more complex experience involving elements of reflection, and contains, in germ at least, a judgment of approval or disapproval. Mr. Taylor regards this reaction of satisfaction and dissatisfaction as the one ground-category out of which all other ethical conceptions may be developed, a position to which we do not commit ourselves here. It is clear, however, that the

[1] *The Problem of Conduct, Chap. VI. Pleasure, Duty and the Good.*

selective act by which a proposed social variation is appropriated or rejected would, as consciousness develops its reflective functions, come to be a judgment of approval or disapproval. And we should have a proposed ideal variation on the one hand, met with a judgment of approval or disapproval on the other. The question then arises; If we translate the social transaction into a judgment of approval or disapproval pronounced in view of a proposed ideal of conduct, have we not thereby created an ethical situation? It is very easy to make a mistake here in the way of overlooking real distinctions. If we recall the fact that the ethical judgment, or assent of will, as we designated it before, is one that not only endorses an objective situation, but through its assent makes it *unconditionally binding,* it will become apparent that the assent or dissent we call *ethical* possesses a quality which differentiates it from general judgments of approval or disapproval. A general social judgment of approval or disapproval would be one that would involve simply the congruity of the proposed variation with the habitual life of the individual or the community. But there is nothing distinctively ethical in the notion of congruity. A proposed variation might be congruous for a variety of non-ethical reasons, and the judgment of approval might be one that had nothing distinctively ethical in it.

In the social judgment of approval or disapproval we have presented simply the *genus* but not the *differentia* of the ethical. We have yet to discover the characteristic quality which translates a general judgment of social approval or disapproval into a distinctively ethical judgment. We have, however, made some progress. We have discovered the genus to which the ethical belongs. We may class it broadly as a judgment of approval or disapproval on the part of the social individual or community. Let us then follow our analysis farther. In the first place, there is no evidence that the sense of obligation in its general form is anything but a late development of the moral con-

sciousness. On the contrary, what we may expect, in the first instance, to find is the more or less segregated development of special forms of obligation within very circumscribed social limits. This will be true at least in the lower stages of development. Morality only tends to universalize itself, when, under the influence of the great moral religions and other moral forces, the social ideas of man begin to transcend ethical limits and tend to become universal. In fact, it may be said with some truth that a fully developed conscience must wait on a universalized social consciousness. Bearing in mind that our special problem here is that of the *unconditionalness* of moral obligation, involving of course its innerness, there are two methods by which we may seek to account for this. The first and more formal is that followed by thinkers of the school of Herbert Spencer who find in the development of the various forms of objective control to which man is subjected in society, the norms out of which the ethical control develops. Thus there are at least three distinct types of outer compulsion to which the members of the social group will be subject: the religious, the political and public opinion. Taking the religious form of control as an instance, this will be effected in the lower stages mainly by the *taboo* or the setting apart of certain objects as sacred or accursed and not to be touched; in the higher stages, by associating the control directly with the will of the Deity. The political control is obviously one of the most obtrusive and effective inasmuch as its sanctions operate more swiftly and more universally. But the most general form of control is doubtless that of public opinion, which is the organ through which the judgment of the group-consciousness is brought to bear on the conduct of its individual members.

The main contention of this school; namely, that these objective controls tend to become inner and subjective and serve as principles of judgment in accordance with which men express approval or disapproval; this contention, I say, may be accepted as resting on solid grounds of evi-

dence. Observation of men in society shows that this process has been generally operative, the result being that the whole mode of reaction of the members of any social organism, provided it be sufficiently large and permanent, like a nation, will take on the complexion of the social conditions and forms of control under which they have grown up. We shall be justified, then, in admitting the correctness of the opinion that this tendency to pass from the objective and outer to the inner and subjective goes a great way toward explaining the rise and character of our social judgments of approval and disapproval. But it does not fully explain the categorical imperativeness of the ethical judgments. Men very soon learn by reflection to distinguish between what they call the relative and the intrinsic or absolute, and while they may not always be able to render a clear account to the metaphysician as to what these terms mean, they nevertheless cover a real distinction. There are some things that can be shaken and these vary with circumstances. But an ethical judgment at least ignores this and is uttered with the consciousness that what it binds on earth shall be bound in heaven and that what it looses on earth shall be loosed in heaven. We are not concerned here with the question whether this consciousness may not be mistaken. We are interested in its existence as a fact and in the question whether it is completely explainable by the principle of the Spencerian school. And we think a negative answer follows in view of the fact that reflection is not as a rule deceived by its judgments, and that were ethical judgments merely relative in fact, they would cease to be unconditional. It is impossible for reflection to perpetrate upon itself a pious fraud of such magnitude.

This leads us, then, to consider the less formal and more intrinsic method of accounting for the unconditionalness of the ethical judgment. We have already pointed to the fact that moral evolution has doubtless followed special lines and that the development of a perfectly general sense of

obligation is no doubt a late product. The method we are about to exemplify is one in which an effort is made, by analyzing the simpler forms of experience, to show how the sense of *justice,* for example, would be developed out of conditions where it did not already exist. The aim is thus to trace the genesis of all the specific contents which enter into the general sense of obligation. The analysis here entered upon rests on the supposition of the existence of a plurality of social units in a state of interaction. No higher degree of social organization is presupposed, and the social intelligence is supposed to be at that stage where collision would be a frequent, if not the ordinary, mode of interaction among the units. We are supposing that in the minds of these rude units the sense of justice has not as yet arisen, and the question is, how are we to suppose them to come, through their experience, into the possession of a rudimentary sense of justice? Let us suppose that a group composed of *a, b, c, x, y, z,* have been hunting, and that when it comes to the distribution of the kill, *x, y, z* combine to seize all or the larger share of the meat, leaving *a, b, c* practically without any of the desirable commodity. Inevitably there will spring up in the minds of *a, b, c* the feeling that they have been hardly used, and without much reflection, perhaps, they will adopt measures of reprisal. Now, however crude the experience of *a, b, c* may be, there will without doubt be present in it the feeling that they have not been *fairly* treated. This will be a motive, though very likely not the dominating one, in their efforts toward reprisal. Should they proceed to assert their claims against *x, y, z* it is difficult to see how this group could in the end escape the feeling that they had aggressed on *a, b, c,* and that in fairness part of the kill in their possession belongs to *a, b, c.* We are not supposing any erudite reflection but simply a judgment of which a consciousness a little above the dog's would be capable. The reflection we speak of might be temporarily drowned out by the passions of the conflict that would

arise, and the whole outer phenomenon would doubtless be that of a struggle of might with might in which the prey would go to the stronger. But these struggling forces are conscious units and, however low down in the social scale, have a certain power of entering into the point of view and feelings of their social others. And this rudimentary social imagination would be the theater of an inner drama less spectacular than the outer, but not less potent in shaping the destinies of the parties concerned. The working out of this inner drama may be described as follows. The sense of being defrauded, which leads *a, b, c* to seek restitution, would lead the minds of *x, y, z* to a responsive feeling of having aggressed on the legitimate expectations of *a, b, c*. This sense would put *x, y, z* in the wrong, and whether they yielded to it or not in action, there would be something in their consciousness that would persist in assenting to the claims of *a, b, c*. No doubt this assent would at first be angrily crushed back as something traitorous and the issue would be fought out on the field of battle. But it has at least shown itself in the world and has marked an epoch in human experience.

Let us consider now what is involved in this experience and what it is that *x, y, z* now know which they did not know before. Briefly, we may say that they have arrived at the germ at least of the sense of *justice* in their feeling that they have aggressed on *a, b, c* and owe reparation. But what is the sense of justice in its essence? We must bear in mind that, however undeveloped, the group we are dealing with is a social group and the members are social units. They will have in connection with their joint enterprises like this kill, a dim consciousness of community which will be the tacit basis of their co-operation. Now just in so far as this sense of community dominates them they will have the sense of a common social interest. But what is a common social interest? It is one in which the individual members share *equally*. This feeling of *common* interest so far as it operates at all will give rise to the

feeling in the consciousness of each unit that he is not working exclusively to his own hand, but that he is working for the community, and this feeling will lead him to decide against himself when through his instrumentality part of the community has failed to profit by the joint labor of himself and others.

The rise of the sense of justice, or rather, the sense of *injustice*, will thus be mediated by the sense of a community of interests in which the individual members are conscious of sharing equally. I use this term *equally* here in a qualitative rather than a quantitative sense. I do not forget that the lion's share of the kill would be more than that of the wolf or the jackal. But in truth it is in a community of relatively equal social units, that is, among foxes or lions or men, that the sense of justice would have any chance of rising. As a matter of fact, only among men would the conditions of its rise clearly exist. Its presupposition is a community of units of the same kind, and we must suppose this sense of kind and the community of interests to which it gives rise as supplying the social soil out of which alone the sense of justice could be generated. Now, in view of community interests in which the social units who make up the community are conscious of sharing in common, my sense of justice will be my feeling that the share of every other unit in the common interest is like my own, and I shall feel obliged to abstain from injustice. My experience would be likely to take this negative form because the notion of injustice is the one that immediately violates my sense of community of interest. Let us bear in mind that the sense of justice *is* the *feeling of the equal share of all in an object of common interest* and that the sense of injustice is, therefore, a direct contradiction of the sense of community of interests. In another place we have submitted the community consciousness to analysis and have found that there is no such consciousness apart from the social consciousnesses of the individual members of the community. The community arises out of a

basis of common interests, that is, interests in which all the individual interests coincide, and its consciousness is simply what all the social units think it to be in so far as these thoughts are alike. In the last analysis, then, the individual consciousness is the bearer of the ideal of community, and each social individual's ideal of community will be identical with the ideal of his objective self, so far as he is conscious of having interests and living a life that he shares in common with all the social units of the community. *The voice of justice will therefore be that of this equating social self requiring that all units shall share equally in this common life and interest.*

We can say, then, that we feel the obligation to be just because justice is an immediate implication of our social sense of community. Let us turn now to another law of conduct that is indisputably obligating in the ethical sense, the law of *truthfulness.* Every man feels unconditionally obliged to be truthful, notwithstanding the perplexing question as to whether a lie be ever justifiable. For the gist of the whole question here is not whether a *real* lie is ever justifiable, but rather whether what appears to be a lie may not turn out in some instances not to be a lie at all. A lie arises out of the relation between our thoughts on the one hand and our words and actions on the other. Normally our words and actions stand as symbols of our thoughts, and when they really symbolize they do not deceive. A lie is the use of a false (that is, a misrepresenting) symbol with the intention to deceive, and when it attains its purpose someone has been deceived into thinking something true that is not true, or real that is not real. It is not the intellectual form of the lie, but its ethical content with which we are concerned here. Now, the ethical significance of the lie consists in the fact that the *legitimate expectations of someone have been intentionally disappointed,* so that where he was led to anticipate one kind of result nothing at all, or something different, has come to pass. A lie is much wider in its scope than the promise, but the case

of a promise or definite pledge will no doubt supply its clearest instance. Let us go back, then, to our primitive groups, *a, b, c* and *x, y, z,* and let us suppose that they divide into two companies, agreeing to share equally of the products of their efforts. But *a, b, c* agree among themselves to keep back a certain percentage of their kill for their own use, putting the remainder into the common stock. Let us suppose that *x, y, z* discover the trick that has been played on them. They will not only have the sense of injustice in being defrauded of their share of the kill, but they will have an added grievance. The group *a, b, c* have intentionally deceived them by attempting to make them believe that a part of their meat is the whole. This meat *all* belonged to the common stock; here lay the *injustice.* But *a, b, c* attempted to pass a *portion* of it off for the *whole;* here was the *lie.* In what, then, did the lie consist? In making a false representation? This might be done without intention to deceive. It would not then be a lie. Moreover, objectively, the injustice may take place without the lie. It would be possible for *a, b, c* to hold back part of the kill in various ways without deceiving. In such case, while *x, y, z* have been unjustly treated, they have not been deceived. The essence of the lie in this case seems to consist in two things; subjectively, in the purpose of *a, b, c* to employ symbols falsely so as to make a false representation; objectively, the fact that legitimate expectations on the part of *x, y, z* are disappointed. I say legitimate expectations because *x, y, z* might expect something that would be unreasonable and which *a, b, c* would not be guilty of lying in not fulfilling.

In setting up the standard of legitimate expectation, however, we have appealed directly to a social criterion. The standard of legitimate expectation will be the habitual interpretation the community puts on such transactions,—the customary implication of such pledges as *a, b, c* have given *x, y, z.* This will form the standard of legitimate expectations for *a, b, c, x, y, z;* and the deliberate purpose of

a, b, c to contravene this standard and thus deceive *x, y, z*, is what constitutes the essence of their lie. If, then, their lie should be brought home to them by the forcible efforts of *x, y, z* to right the wrong or by any other means, they would find themselves on reflection assenting to the accusation of those they had deceived. Their assent would be an endorsement of truthfulness as obligatory, though here it would take the negative form of an unconditional condemnation of lying. How, then, is lying related to the social consciousness? In this way,—the social consciousness is a consciousness of *common agreements*. This is its essence and constitutes the fundamental bond of sociality without which society could not exist. Now, these common agreements include not only common interests but common modes of prosecuting them, and these will involve modes of speech as well as modes of action. There will thus arise certain customary connections between forms of speech and forms of practical activity on the one hand, and the conservation of the interests of the community on the other, and these customary connections will form the grounds of legitimate expectation in this community. *The lie is a direct breach of this form of publicity, and being so, receives the immediate anathema of the social consciousness.* We may say, then, that lying is unconditionally condemned in this case because it directly contravenes one fundamental condition of the social consciousness itself.

The instances of justice and truthfulness will be sufficient, I think, to illustrate this method of tracing the genesis of ethical obligation. Now, as between the two methods, the greater importance must, it seems to me, be assigned to the second. We are willing to admit that there is a tendency for objective controls to become subjective and to become principles of judgments of approval or disapproval. But what we fail to see is how this supplies a special ground for the *ethical* judgment. Our judgments of approval and disapproval are pronounced from various points of view, and we are conscious that they have various

degrees of authority. Why should some of our judgments have a kind of authority that is unique; why should they be unconditional, excluding contingency and possible exceptions? It would seem that the only answer to such a question is to be found by an analysis of experience with a view to determining the soil out of which the judgments have arisen. We have seen that justice and truthfulness are immediate deductions from sociality itself. These may, I think, be taken as representative instances, and we may draw the general conclusion that the first ground of ethical obligation is to be found in the constitution of the social consciousness. The concepts of right and good are concepts of the content of ethical obligation. The whole content of obligation is the sum of the kinds of conduct that are affirmed in unconditional judgments. Thus in its details obligation enjoins justice, truthfulness, honesty and the rest. But as a whole and in its unity, it enjoins an ideal of action which taken as a whole embodies the conduct of an ideal self. This ideal of conduct is what would be actual were we ourselves what we ought to be. Now the right and good are categories of this conduct of the ideal self both in its details and as a whole, although the category of good is more ordinarily applied to the ideal content as a whole. We may ask, then, what are the right and good in their ethical significance, and how do they characterize the ethical content? We saw in our consideration of the content of the ethical ideal that it resolves itself into kinds of conduct that are obligatory, as, for example, we must be just, truthful and honest. The laws of obligation are therefore laws of conduct and as such injunctions on the will. The right is simply the *principle that is exemplified in all these laws of conduct.* If we codify all the details of obligation under one concept, we shall have the concept of the right. Thus when we say, "Shall not the judge of all the earth do right?" we mean to ask if his conduct shall not ideally fulfill all the laws of obligation. This being the case, righteousness will be an

attitude of will, the subjective equivalent of the right in conduct. The righteous will is one that realizes the right in conduct. The ethically wrong is the opposite of the ethically right. In its details it is injustice, falsehood, dishonesty, specific infractions of the laws of right, while in its *unity* it stands over against the right in conduct as that which opposes and nullifies its laws. Righteousness stands, then, as the subjective disposition of will that corresponds to the right in the sphere of conduct.

How, then, are right and righteousness related to the social consciousness? We have seen that the various laws of obligation owe their unconditionalness to the fact *that they are immediate deductions from the constitution of sociality itself.* The right, being the ideal unification of these laws, would stand as the *obligatory social ideal itself in its unity,* and righteousness would be the attitude of will that would lead to this *ethical wholeness* of the social in the sphere of conduct. Turning now to the category of the *good,* we find many analogies between it and the right, although it is a category of feeling rather than of will. There are also important differences between the right and the good. The contents of the right are the laws of obligating conduct. These are right by virtue of their very nature as obligatory laws of conduct. But the content of the good is not laws of conduct but states of feeling. These may be summed up under the one term, happiness. The content of goodness will then be happiness while unhappiness or misery will be the bad in its content. But we meet with a peculiar difficulty here. Happiness and misery in themselves are wholly non-ethical. How, then, do they become the content of ethical good? Let us change our terminology here, substituting desirable for happiness, and the situation will become clearer. The desirable is identical with the good. But there are many things that are desired that are either non-moral or positively immoral. It is clear that we must have some criterion of the ethically good that will enable us to define the morally desirable.

It is here, again, that we are obliged to look into the social consciousness for our criterion. The socially good man is the man to whom the desirable is the health or well-being of the social organism of which he forms a part. We use the terms health and well-being here in the broadest possible sense. Now, the *morally* good man is one who has the same object of desire but with a difference. The mere socially good man might be led to approve the immoral, provided it seemed to contribute to general welfare. But the morally good man will find his criterion in the principle of rightness. He will not go so far, perhaps, as to say that the good shall always be identical with the right, but he will apply his criterion negatively and say that nothing that is wrong or immoral can be good. The ethical good will thus be the whole body of the desirable so far as it is not inconsistent with the law of righteousness. We thus find that the ethical category of the good is the social category qualified by the application of the law of righteousness as a principle of exclusion. The doctrine as thus developed is materially different from that of Kant, who excludes *feeling* and *desire* from the moral category of good and fills it up with stoical satisfaction arising from the consciousness of virtue. We admit natural happiness as content of good, and only insist on the exclusion of those elements that are inconsistent with the reign of moral law. The moral good man is thus the social good man *plus* a discrimination that excludes all immoral elements from the category of goodness.

Genetic psychology develops an account from the point of view of the individual *socius* that corresponds with the one here given, although expressed in different terminology. The center of the genetic representation is the developing self, and it is shown how the process by which self-realization is reached is also the process in which the consciousness of the other arises, so that the social consciousness becomes a function of a developing self. Now, there are two sides to this unfolding process; (1) its relation to the social

others, (2) its relation to the social consciousness of the self. We put the objective first because there is a sense in which the realization of the object precedes the process of self-realization. If we suppose, then, that a two-sided movement is in progress, we shall have on the objective side a developing apprehension of the group of social others that constitutes the community. Our concept of this community will be constantly enlarging, and the result will be that we shall find ourselves entering more and more into the life of the community. On the side of the self the process is that of the growing social nature of the self. We have seen that, in the last analysis, the self is the real bearer of the social consciousness; that the last and permanent results of the social process are, therefore, the development of the social nature of the self. It is from this subjective side and from this point of view,—that of the socially developed self,—that the genetic psychologist, or as we might have said, the genetic sociologist, approaches the ethical problem; and he finds from this point of view that the sense of obligation arises out of a kind of dialectic between the individual and the social self. Thus the individual self, setting itself over against various forms or stages of the social self, finds that their claims upon it take the form of obligation. And in all cases the claim is translated into the obligatory, through the *assent* of what we may call the private self. Thus, we find that the claims of the family become part of the duty of the private self, not only claiming precedence of its private interests, but having their claim allowed in its consciousness. Moreover, the claims of society and of the state exercise the same sort of pressure and have their claims assented to in the consciousness of the individual. In *Foundations of Knowledge* I have generalized this situation under the principle that the larger and richer self claims the right to legislate for the narrower and poorer self and has its claims allowed in the assent of this poorer self. The reason for this was not further pointed out in that treatise, but it seems to me that we are in a

position here to follow out the analysis a step or two farther. It is perhaps a too mechanical mode of representation to say that the larger self claims the right to legislate for the narrower or smaller self. If, however, we translate the notion of the larger self into qualitative terms we shall find that it means the self that is the bearer of the communal consciousness, and that this self, in and through this consciousness, develops the representation of a life in which it and the other social existents like itself participate in common. The self thus becomes the bearer of a common life, or, in view of the social ideal, of a common life-ideal, in which it has an undivided interest and which offers to it the largest possible sphere of realization. The pressure of the larger self thus becomes identical with the pressure of the larger social ideal on the consciousness of the individual self. Now, we might still ask why the pressure of this ideal should take the form of imperative demand and why the private self so meekly assents to it. 'This,' we may say, 'is pusillanimous and the private self ought to show more of the spirit of resistance? However, we get a clue to the solution of the knot when we remember that it is just this social consciousness out of which our ideas of justice, truthfulness, and honesty have arisen, and that just as these are involved in the maintenance of the integrity of the social ideal along special lines, so likewise the social ideal as a whole exerts a corresponding pressure upon the consciousness of the private individual and has its cargo of claims allowed. This social pressure exerts itself, in the last analysis, by virtue of its *commonalty,* for it will always be assented to without debate when the terms of the situation have been made clear; and what is a common concern to other existents and myself alike will rightfully take precedence of what is exclusively a concern of my own. And in general the only reason the private individual needs in order to convince him that any given claim has the rightful pressure of duty is to be shown that the claim presses on *all* individuals *alike* in like circumstances.

Up to this point we have been dealing with the social roots of ethics. But the question will arise whether ethics be a purely social phenomenon or whether it may not have roots, or at least implications, that are *ultra*-social. This is a vital question inasmuch as the ethical includes so many of the vital interests of humanity. Now, Kant among the modern moralists, and the Kantian school, postulating an ultra-social root of ethics, seek it in their doctrine of the transcendent self. Regarding the self in consciousness as purely phenomenal and not, therefore, an adequate bearer of moral issues, the Kantians relate ethics directly to a *real* self that transcends experience and cannot be theoretically determined, but which from the practical point of view, Kant defines as will. This transcendent self conceived as will becomes the bearer of a kind of intelligence which Kant calls practical reason and which determines man as, first, the real subject of duty and then as free, immortal and an heir of God. The whole of the Kantian contention depends, however, on the validity of his distinction between a *phenomenal* self in experience and a *real* self that stands outside of experience and is incognizable. Without arguing the case here it will be clear that for those who agree with the doctrine developed in this treatise and also in the *Foundations of Knowledge,* Kant's distinction is not tenable. The only self which we can know to be immediately real is the self that functions in experience. We have seen that consciousness itself must be taken as real, else the whole world becomes illusory. If consciousness be real, then the self that functions centrally in it and to the type of which all its activities tend to conform, will be the great reality and it will not be necessary to go outside of the house in order to find its real owner. In short, it is with the real self and not a mere phenomenon that we have had to do from the beginning. This appears in our doctrine of existents where we trace the things of knowledge to extra-mental but not to extra-experiential roots. It also appears in the whole social doctrine thus far developed. The social

selves and others, with which we deal, are real existents, and their individual and social consciousness is one in which the real self finds expression.

It is clear, then, that if we are to seek for ultra-social roots of the ethical consciousness we must look in a different direction. But if the Kantian expedient fails us, there is but one other transcendent spring to which we could look, and that is supplied by religion. If it be necessary to look for a transcendent ground of ethics, it will be to seek in the consciousness of some self analogous to our own. Moreover, this ground must also be transcendent not in any mechanical sense as lying outside or above or below the plane of my individual self, but as supplying something which my own selfhood lacks, and which is at the same time necessary to the founding or the completing of ethical theory. If, then, any such transcendent root or spring be needed, we shall have to seek it in the notion of some divine selfhood analogous to the God of religion. But we need to determine, in the first place, whether and in what sense our ethics requires this transcendent supplementation. As to these questions it seems to me to be clear that ethics does not rest *immediately*, at any point, on that which is transcendent. Our analysis has shown I think, that our ethics arises directly out of our social experience. The immediate data of obligation, right and good, are social, and we have shown in detail how such principles as justice and truthfulness arise immediately out of social experience. There seems to be no legitimate ground, then, for the claim sometimes set up, that there is no distinct basis for ethics outside of religion. We think that both ethics and religion would be injured by such a false claim as this. If, however, ethics rests on a distinct and extra-religious basis in experience, how can it be shown to be necessary that ethics should at some point appeal to the transcendent ground of religion?

We are not considering the historical question here, for no one denies the influence which religion has undoubt-

edly exercised in the development of both theoretic and practical morals and it is not our business here to attempt to measure the amount of that influence. What we are concerned with is the question whether at some point ethics will find the appeal to religion, or at least to religious grounds, necessary in order to complete itself or validate its own conceptions. Now, if we revert to the chapters on sociology we may recall that it was there found necessary to relate the social movements as a whole to some transcendent principle. And the data which rendered this necessary were revealed in the fact that the social movements as a whole were found to completely transcend that synthesis of thought and purpose by which fragmentary social movements are ideally informed and guided. We had our choice, then, between an alternative that left the social world as a whole to accident and blind fate, or one that related the social, in common with other phases of world-movement, to some transcendent principle of prevision by which it is unified and guided to a rational goal. The latter alternative being chosen, it was found that the social world could be completely rationalized and its movement as a whole redeemed from chaos only by informing it with a thought and design that could be the function of an eternal consciousness alone, that is, of a consciousness that is able to comprehend and ideally determine the whole and not simply the parts. Now, the ethical situation presents something analogous to the social, and an appeal to the transcendent will be in order; (1) in view of the ultimate relativity of all the concepts of social ethics; (2) as a point of view from which alone some of the ultimate problems of ethics can be solved. It will be evident, we think, from the discussion itself, that all the concepts of social ethics are left in a condition of relativity. We may say in general that these concepts arise as functions of the developing sense of community. This being the case, they can never rise above their source. Every community in so far as it has developed its community-consciousness, will belong to

the past, and every step it makes in advance will involve the transcendence of its own communal consciousness. But it is this communal consciousness of which the ethical judgments are functions; consequently the social standard is constantly being left behind. Or, if we adopt what is perhaps a more adequate conception and say that the communal consciousness we mean is a progressive one including accommodation as well as habit, it still remains true that our standard is constantly changing. Add to this the fact that different communities are not only variable, but that they do in fact vary indefinitely and the further fact that a common social standard that shall voice the whole is not available, we are forced to the conclusion that the foundations of morality are not much firmer than shifting sand, and there is danger that all our ethical judgments may become mere opportune pronouncements of expediency. In order that this relativity may be cured and our ethical concepts founded on a solid basis, it would seem that we need nothing short of an appeal to some consciousness in which the social movement as a whole stands ideally realized, or at least a consciousness in which its movement as a whole is not determined by accident or blind fate. Only from the point of view of such a consciousness can we conceive our relative concepts as completing themselves and, as concepts of the whole, acquiring *unconditional* validity for the parts.

Moreover, there are a number of ultimate problems in ethics that do not admit of solution from the ordinary point of view of sociology or social psychology. Take, for example, the problem of freedom. It is found that the most psychology can do in this matter is to show, which it does very conclusively, that conscious choice is self-determining in its form, and that it therefore manifests the form of freedom. But the individual is related to antecedents that lie outside of his present consciousness, by means of development and heredity as well as through the influence of his environment. It is not enough to say

that all these influences, whatever they may be, must enter into the present choice as conscious motive and thus conform to the form of freedom. All this is conceded. It is not the *form* but the *substance* of freedom that is giving us the trouble. The influences we speak of may so predetermine us that anyone knowing them could safely predict our choice on the principle of natural causation. Then again, our normal choices are social rather than individual functions. I mean by this that they are functions, in general, of the self as a *socius*, as the bearer of a social consciousness, rather than functions of the private individual self. This is true universally, I think, in the case of ethical decisions and these are the only decisions in connection with which the issue of freedom is important. In short, it is to the self of the social relations, and, therefore, to the social self that the question of duty becomes real and the issue of freedom important.

Let us then attempt to restate the problem of freedom from this point of view. Analytical psychology tells us that the form of conscious choice is that of freedom (it is teleological). But biology and genetic psychology unite in telling us that our present choice is a member of a developing series, the parts of which are, through environment and heredity, predetermined by their antecedents. Biology and genetic psychology say to us virtually that the data they are able to discover are practically sufficient to so enmesh this free-in-form choice of ours in the net of antecedent conditions as to make it possible to account for it on the principle of natural causation. But social ethics tells us that there are choices, and these not few nor unimportant, which we are in duty bound to make, irrespective of the testimony of biology or genetic psychology, and our consciousness, untroubled by the problem of predetermination, says "yea and amen." The question of freedom is simply this; whether or not we are able to obey the *socius* that is in us and do what presents itself as the content of our duty. The vital issue in the problem of freedom is not,

then, whether the form of our choice be self-determination or not. It is conceded that this is the form, and that moral choice is formally free. But is it free in fact? Here the whole question resolves itself into this, whether, granting that we have the power to choose ethically and do our duty, as a matter of fact, there is anything in our action that was not predetermined by natural causation. Of course, if it be true that, given the fact that the form of the choice is teleological and the agencies of heredity and environment, the nature of the choice could be predicted, then it would seem that the old Kantian dilemma were back on us again and that while we cannot deny the possibility of freedom, yet as a matter of fact everything seems to be determined by natural causation. Let us be clear on the point that the issue of freedom does not turn on the question whether we can or cannot do our duty. But assuming that we can do our duty, has the content of it been predetermined by natural causation so that our choice is purely formal, or has our choosing been itself a *vera causa* but not of the natural causation species? When the question has taken this form we see how important the ethical situation itself becomes. Let us review its elements. On the one side we have the pressure of some social claim, some kind of conduct that is to be performed. The situation requires me to treat this man justly, to be truthful in this relation and to do the honest thing in the other. My individual consciousness assents to the claims and they become obligatory. My choice to do is determined by the obligatoriness of the claim. I choose to *do* because it is my duty. The immediate sequence in my action is this: I ought to do this action and therefore I choose to do it. Now if the situation be real and my choice is the result of my sense of duty, I have engaged in a transaction that cannot be accounted for by natural causation. But if it could be maintained that this is the situation only in appearance, while on a deeper view it comes out that everything *was* predetermined and that my choice could be predicted on the principle of natural

causation, then, of course, my choice and all its elements would be reduced to terms of natural causation. The whole situation turns on the question whether its central term, the sense of duty, of obligatoriness, can be resolved into a pure product of natural causes. We have seen how it arises out of a process of social experience and how it is a function in general of the social consciousness. This, as we have already seen in arguing the first point, reduces it to a condition of relativity. Now if the consciousness of community be really relative, what is the consequence? One of these consequences which we have already indicated is the fact that the social movements as a whole are left without conscious guidance; that is, to accident and blind fate. But accident and blind fate are only names for that which, in the last analysis, happens without conscious intention or design. Let us substitute for these high-sounding terms the phrase natural causation, and we shall have a view of the world in which the final agency of the world is conceived after the type of natural causation, while all agency of the conscious type would be regarded as subordinate and relative. Now the point which we wish to bring out clearly here is this, that the reality of free choice as a form of agency that cannot be reduced to terms of natural causation, depends, in the last analysis, on the question whether the duty-motive which calls it forth is nothing more than a function of the social consciousness of the individual. We have seen that this social consciousness itself is unable to escape relativity and the consequent lapse into the position of a mere phenomenon of the world of natural causation, unless it makes an appeal to a transcending consciousness in which it is able rationally to complete itself as a whole. Here in the ethical sphere we have now a similar issue. If obligatoriness or oughtness be a pure function of the social consciousness, then in order to vindicate its reality and defend itself from reduction to terms of natural causation, it is necessary that ethics should join with the social consciousness in its final appeal

to a supreme court. If obligation be, in the last analysis, and in its unqualified form, the function of a consciousness that conceives and determines the whole, then it has the right to take its stand as a *vera causa*, and no reduction of actions to terms of their natural antecedents will be able to alter the fact that to act from a sense of duty is to act freely.

It is not proposed here to go into detail regarding the other ethical categories. That of freedom may be taken as a type of all. Combining the two considerations which we have elaborated at some length, it will become clear, I think, that ethics cannot be regarded as purely a function of sociality. That the social roots are important, in fact vital, no one will be able to deny. Morality is at first a social product, if we use the term social broadly enough so as to include all the forces, religious and otherwise; and it has roots that are independently religious and inherent in the nature of man as a social being. But the attempt to root ethics in exclusively social soil will have the effect of rendering all its categories purely relative. The central category of obligation itself will lose its unqualified force, and freedom will dissolve into a mere illusion of natural causation. Such a result would be deplorable, inasmuch as the ethical motive supplies the principal ground for man's assertion of his true individuality in a world where the victorious appearance is so generally on the side of natural causes. If conscious volition is ever to assert itself in the world as a real agency it would seem that its one golden opportunity arises in connection with the claims of duty.

CHAPTER II.

THE ETHICAL SYNTHESIS.

FROM the standpoint of duty the world of conscious activities is not only one of individualism, but also one of pluralism. The proof of this is short and not very difficult. There is no duty that is not the duty of one or more moral agents. This might seem to be contradicted by the existence of public duty which is an affair of the community. But we have seen that there is no social consciousness apart from that which is borne by social individuals. The community, apart from its collection of units, exists only in the consciousness of its individual members. A public duty, then, is only a duty which imposes a common obligation on all the members of the community. Its recognition must be in the consciousness of individuals and its response will be a response of individuals. The ethical community is thus resolvable into a plurality of individuals making a common response to a common moral appeal. That the ethical individual is a *real* individual and not a mere phenomenon, follows from the doctrine of freedom which was developed in the last chapter. If moral choice be a *vera causa,* then the ethical self that makes the choice is real. But the ethical world is also one of pluralism. The individual that is real must also be an existent in the sense in which we have used that term throughout these discussions. If at any point it becomes a mere phenomenon of something else it loses its claim to real existence. Now,

the ethical individual is a *vera causa* of the teleological type. This we have shown. And being so, its existence cannot be resolved into the phenomenal series of natural causation. As a *vera causa* it maintains itself as a real existent of its own type. From the ethical point of view, then, the logical result seems to be pluralism,—a world whose being resolves itself into a multitude of real existents of the individual type. Not only does this seem logical, but we see no valid reason why it should not be accepted. What else should the ethical world be than a plurality of real individuals? That is the veritable presumption of moral action and it is shrunk from only by those who think that its admission commits them to pluralism as the final word in philosophy. We shall see, however, that the best way to overcome pluralism in the end is not to deny it in its own field. Let us carry our study of the ethical situation a step further. If the ethical world resolves itself into a plurality of individual agents each of which is a *vera causa*, then it is clear that we have a body of co-existent individuals interacting in the mode in which each is individually a *vera causa*. That will be a first postulate of an ethical world. And its negative demonstration will take the form of a *reductio ad absurdum*. It is impossible to conceive an ethical world as continuing to exist after this form of interaction has been eliminated. But we have seen that ethics is a form of sociality and that the pressure of moral obligation,—that datum which translates moral choice into a *vera causa*,—springs directly out of that consciousness which the individual members of the community possess in common. The first presupposition of the ethical world is, therefore, sociality, which may be defined as that form of interaction in which each of the interacting units has the power to enter, through ideal representation and sympathy, into the conscious life of every other unit and which has the effect, therefore, of developing a consciousness of community as a common medium for joint activity and organization.

From this point of view it would seem that one may be a pluralist in his theory of existence and in his ethics without thereby becoming liable to the drastic treatment which Professor Royce administers to him in what might be called his "short and easy way with realists."[1] The assumption that a plurality of existents in order to be real must be mutually exclusive, like the Leibnitzian monads, has always seemed to me to be greatly in need of justification. Rather, we have the fact of relatedness, and the natural presumption of this is a plurality of existents. What right have we to ignore the fact in developing our theory of the nature of the being that underlies the fact? Starting with the fact that there is relatedness, it is open to us to conclude, hypothetically, to the nature of the terms of the relation. But it is to be remembered that all the conclusions derivable in such reasoning are indirect and mediate, while on the contrary the judgments in which pluralism is affirmed take the form of immediate inferences from data. Thus we have seen, in the analysis of the various forms of certitude, how our affirmation of the real existent arises as an immediate inference from data in consciousness. Again, the reality of the ethical individual is seen not to be hypothetical. Lastly, the reality of the terms of the relation springs directly from the fact of relatedness itself. If, then, pluralism be an immediate deduction from relatedness, it will be evident that a theory of pluralism that denies relatedness is founded, in part at least, on a gratuitous assumption. Let us dismiss the assumption, then, and see how pluralism can get on without it. We are now in the position of a theory that has reached the judgment in which a plurality of existents is asserted and that simply awaits developments in order to determine how such a world is going to get its plurality organized into a system. For it

[1] I refer to his Lectures on Realism in the Gifford Series, *The World and the Individual.* I am not holding a brief here for any form of Realism except so far as it might be involved in the defense of Ethical Pluralism.

is evident that the vital issue here is not some abstract consideration arising out of the nature of substance, but rather the very concrete question as to how a situation that is seen to be both intelligible and necessary is to get itself realized. Now, it is clear that if we have not in the meantime permitted ourselves to be logically handicapped by some *a priori* presumption as to the nature of these existents, we shall not be surprised if we find the fact of relatedness showing itself in experience. In truth, it is just this fact of relatedness that experience has most thoroughly accustomed us to and we should be astonished if we found any section of our world from which it were absent. Assuming, then, a plurality of real existents, we have the fact of relatedness arising in the physical world in those relations with which physics deals and in the world of consciousness, in those relations which constitute the social medium. Here, of course, our concern is with the world of conscious existents where the fact of relatedness expresses itself in the social nature of conscious beings. To the question, then, how a plurality of real existents can overcome their isolation and effect any kind of intercourse we have simply to point to the social nature which, as we have seen, is a congenital possession of consciousness and not merely an acquired characteristic. In short an adequate definition of man will be one that includes his social nature. In defining the social unit it would be no greater oversight to leave out consciousness than it would be in defining a conscious being to leave out sociality.

It is by virtue of this sociality, then, that a plurality of psychic existents are able to overcome the isolation involved in their plurality and establish a common medium for intercourse and organization. To return, then, to the ethical problem, we have seen that the nature of the ethical situation is such as to involve the real existence of a plurality of ethical individuals. There is no escape from this conclusion and we shall find that any expedient we may adopt to reduce the pluralism of the situation will be one

that also reduces its ethical efficiency. The pluralism is one of individuality and existence. But pluralism and distinct individuality do not constitute the whole reality even of the ethical units themselves. The fact of relatedness is part of their reality and this expresses itself in their common attribute of sociality. The matter of the individual existent, as distinguished from the form of his being, is seen to be qualified with just this attribute of sociality, which is the capacity to transcend the existential chasm that divides him from his fellow and to enter, through thought and feeling, into the life of his fellow. If we regard this sociality as an original endowment of the individual (and why should we not?) we shall not be at a loss to find common grounds in the ethical world by virtue of which isolated individuality is overcome and the world of moral agents, while remaining plural in its existence and individuality, finds in the bond of sociality the basis of common life and organization.

We proceed now to the consideration of *method* in ethics. The question immediately comes up here as to whether there can be a science of ethics, and if so, what the nature of that science will be. And in this connection we come upon the debated question as to whether a natural science of ethics be possible, and if so, then the question as to its limits. Lastly, we have the problem of the metaphysics of ethics and of the synthesis of the scientific and the metaphysical. The question whether a science of ethics be possible or not, might not seem to be open in view of the wide-spread efforts that are made to treat ethical phenomena under the rubrics of science. In fact, on perfectly general grounds the question is hardly debatable and it is not likely that it would be much in debate were there not a wide-spread tendency to reduce the area of the question by claiming that a *natural* science of ethics is possible. Now, we have seen that the one principle of natural science is that of natural causation; for, whatever construction science may see fit to put on the principle of

natural causation, whether it tend more to the dynamic conception of causation, or to that of Hume who reduces it to pure antecedence in time, it is the universal presumption of natural science that the explanation of a thing is to be sought in its antecedents, that is, in conditions that have preceded it in time, so that when the antecedents of a present situation have been adequately determined, the present has been shown to be predetermined. The principle of natural explanation is then the resolution of the activity of the present into antecedent conditions by which it is predetermined. In relation to present agency natural explanation is, then, a form of predeterminism.

In view of this, it is clear that the pivotal point of a natural science of ethics would be found in its denial of freedom. In fact, from the genuine natural science point of view, there is no room for serious debate. The case is a perfectly clear one. Freedom is pushed ignominiously into the outer court of the gentiles where it becomes a byword and term of reproach. That ethical choice is in any sense a *vera causa*, that there is anything in it that is not reducible, in the last analysis, to terms of a man's heredity and environment, is denied with such vehemence that one is led to suspect that such a way of thinking involves in some way a scandal to science. But is naturalism so very sure of its case that it cannot bear contradiction? Let us seek to decide this by analyzing a typical ethical situation. We shall take Kant's case of the man who is tempted to tell a wicked lie in order to secure some great personal advantage to himself. We may suppose that he has reasonably assured himself that the prospects of being found out are not great and that he is therefore relatively secure against the ordinary penalties that would follow conviction of such an offense. Now, this man will either yield to the temptation or he will not. In the former case he has proved recreant to his duty which has been denied and outraged and has in this case produced no effect. The man has yielded to the temptation and has

uttered the lie for the sake of the desirable consequences. It is open in this case for the naturalist to claim that the choice of the man is a function of natural causation and was predetermined by the man's environment and heredity. The man was impelled to utter the lie by the desirable object it would secure and yielding to the natural force of the temptation he falls into sin.

Suppose, however, that in spite of this impulsion he resists the temptation and refuses to tell the wicked lie. In this case duty becomes his determining motive and he repels the force of natural desire and through it the predetermining influences of environment and heredity. Is naturalism still prepared to say that, when a man has resisted impulse and chosen to obey the command of duty, his choice is not a real act of freedom but may be reduced to an instance of natural causation? Then, in the first place, he needs to be reminded that the bearing of natural causation in its direct form will be through the channel of desire. The desirable will be in general that to which a man is hereditarily disposed and his impulsive nature as a whole is likely to press in favor of the desirable object. The environment may, of course, contain forces that will bear against the gratification of desire. But we have provided for this negative influence in the supposition that the man is reasonably sure of immunity from its operation. The case is one, in fact, in which a man is left to fight out his battle between desire and duty without outside interference. If he yields to desire he nullifies the command of duty; if he does his duty he resists and nullifies desire. On which side of this battle do we clearly find natural causation operating? Certainly on the side of natural desire. This embodies the trend of the man's nature, and natural causation may be regarded as predetermining a result that is in accordance with the hereditary trend of the organism. But in the case of the decision for duty and the defeat of desire, it is reasonable to suppose that natural causation has failed to determine

the choice and that some other principle has been victorious.

There is one general fact that naturalism is accustomed to completely overlook, and that is the tremendous revolution which reflection introduces into the volitional world. In the field of the spontaneous it may be conceded that the desirable will always be chosen; though even here the genetic psychologists are showing us that the accommodations of the organism are not always in the direction of the habitually desirable, but that predispositions are constantly being modified by the accession of the new. However, conceding the spontaneous to the naturalist for the sake of the argument, we find that the one characteristic of reflection in the volitional field is the power to inhibit impulse and desire. When consciousness becomes reflective, then impulse and desire no longer have complete right of way. It is the business of reflection to bring choice consciously into the presence of *ideals,* and the determination of these ideals is also the province of reflection. In reflection we do not determine simply the desirable; we go deeper than this and determine what *shall be* desirable. There is something *prescriptive* as well as prospective, in reflection. And to this prescribed ideal man finds that he has power to conform his decisions and actions. Now, I am not about to develop here a general doctrine of freedom based on man's power to prescribe and follow ideals;[1] though I should like to venture an opinion that whatever freedom man has is something to be discovered by analyzing his actual experience and not to be either deduced or refuted on *a priori* grounds. What we are about to do here is to admit as possible, merely for the sake of the argument, that reflective choice which results in the choice of the desirable as such may be handed over to the naturalist as a case where in the end the tendency of natural causation has been furthered. If it is the tendency of natural causa-

[1] In Part IV I do make an attempt to develop such a doctrine on the basis here indicated.

tion to lead to the desirable, then wherever the desirable is attained it will be a possible result of natural causes, although it will also possibly be a case of coincidence where the effect has actually resulted from some non-natural cause.

But let us suppose that, as in case of the ethical decision, the reflective ideal that determines the choice is not an idealized form of the desirable, but that its pressure is of such a character that it puts a curb on desire and impulse, not in the behoof of something ideally desirable so that it supplies a higher inducement to desire and impulse themselves, but in behoof of an ideal that claims absolute control over impulses and desires and in this case exercises this control in defeating them. This is the real situation as it rises in experience rather than in the speculation of abstract theory. When I decide in accordance with the ethical ideal and choose to do my duty, natural causation and its law are set aside and my decision to do my duty embodies a *vera causa* of a different type. For it is true that something has come to pass in experience which natural causation has not effected and could not explain. If now, in order to turn the force of the reasoning here, the old saw be brought in and we be told that "after all the law of desire has been fulfilled, for does not the moral man prefer to do his duty and find his highest satisfaction in its performance, and would he not be perfectly miserable if he allowed himself to violate his conscience," we answer, this is true enough and there is a sense in which virtue is its own reward. But after all it is a question of fact; and I would ask in return, when it comes right down to the square issue, what is the virile factor in the motive of a real ethical choice? I say real ethical choice in order to differentiate it from the disguised choice of prudence on the one hand, and from that of the moral pharisee on the other hand, that species of ethical mugwump, who prides himself more on the sense of freedom and superiority which his action breeds in him than in the character of the action per-

formed. If we take a real ethical choice like that of the man in the instance who fights out to a finish the battle between duty and desire, would not such a man laugh to scorn any one who might try to convince him that after all he had decided in favor of the most desirable? There can be no shadow of doubt in the matter. In the thick of the conflict itself the man is sure that the virile factor in his motive was the immediate pressure of the stern obligation of duty. The force of desire was pulling hard in an opposite direction and had to be flatly denied in deciding for duty. After yielding everything that naturalism could reasonably claim, we submit that ethical decision where the lines are clearly drawn, as in the above instance, will always be a Waterloo to the claim that ethics may be a purely natural science.

This conclusion, however, does not foreclose the case against ethics being, in part, a natural science, and the question we are about to take up in this section is this: In what sense is ethics to be regarded as a science, and how far may it be dealt with, if at all, under the rubrics of natural science? Now in dealing with matter that is ethical we are very soon struck with the fact that what we are directly aiming to determine is not what actually is, but what *ought* to be, and the ought to be is what *is to become.* In other words, we are dealing with something ideal,—with something that is both prescriptive and prospective. A science that undertakes to prescribe what is to become, whether the prescription be to the understanding as in the case of logic, to the will as in the case of ethics, or to the imagination as in art, the same is called normative rather than material or natural. From this point of view we should call physics, chemistry, biology, psychology, material sciences, while to logic, ethics, and aesthetics we should apply the term normative. A normative science deals with an ideal which it aims to construct as a guide to judgment or action in its field, and its whole procedure rests on the presupposition of standards or *criteria* of this ideal that are attainable. In view, then, of the fact that it deals

with ideals of conduct and aims to develop *criteria* by means of which the correspondence of action with these ideals may be determined, ethics is to be ranked as a normative rather than a material science.

A normative science is, then, a science of ideals, and these involve standards or *criteria* for the determination of the conduct that will conform to the ideals in question. There are those, however, who have refused to recognize the validity of the distinction between material and normative sciences. Every science is material in the sense that it deals immediately with what *is*. The so-called normative science is only an art. Thus logic, so far forth as it differs from psychology, is an art, and ethics, beyond the point where it ceases to be a natural science, is a mere art of conduct. These critics fail, however, to observe an important distinction. An art like architecture, for example, is made up of a system of rules. The most general of these, which we call principles, are only rules that apply to all kinds of structures and to all kinds of materials. The real principles involved are laws of the different kinds of material that are used, together with the laws of space, matter and the pressure of the medium in which the structure is built. The real principles of architecture will constitute its scientific basis and will in general be the laws of physics and mathematics. If the idea of beauty enters in, as it will in all advanced architecture, then the laws of aesthetics will be drawn upon. But the characteristic of an art is that its real principles are the laws of the sciences on which it depends, while its so-called principles are simply its most general prescripts of procedure. If we take a real normative science like ethics or logic, however, we shall find that while logic is dependent on psychology, for example, for the genetic history of its concepts, yet its principles are derived directly from the study of consciousness as an organ of knowledge. Logic may, therefore, have some difficulty in distinguishing itself from epistemology, but very little in distinguishing itself

from psychology. Likewise, ethics will be able to vindicate its claim to being a real normative science, since it is not only a science of ideals of conduct, but its principles can be derived from no other source than the study of ethical experience. That man is a moral being is a given fact, and the problems of the ideals of moral conduct and the principles of moral conduct find their answer in the study of moral conduct itself. Even in case where an appeal has to be made back of moral conduct, it is to consciousness in some broader form of its experience, and consciousness itself is teleological in its movements. There are ethical rules founded on its principles which lie properly within the sphere of the art of conduct, just as there are logical prescripts founded on the principles of reasoning which properly belong to the art of reasoning. But in both instances the normative science underlies the art and makes it possible.

Now the question whether ethics can be regarded in any sense as a natural science and, if so, in what sense and to what extent, can be determined only by settling the claims between the concepts of the natural and the normative. If we define a natural science as one whose principle of explanation is that of natural causation in the broad sense in which we have used the term in this treatise, then it is clear that a science that is really normative will stand outside the category of natural. For a normative science is a science whose object is the reflective consciousness in some phase of its activity. Thus the matter of ethics is that species of practical activity which has for its center the notion of duty. The movements and processes of the ethical consciousness will therefore be ideal and teleological. In other words, ethics is a science of practical teleology so far as it is involved in the idea of duty. In its normative aspect it is the business of ethics, therefore, to determine reflectively the ideals of conduct and in view of these the principles of the science. The only practical method will be the reflective study of moral experience itself, and that

will include an investigation not only of the forms it takes in the mature experience of grown up men, but also its less mature forms as illustrated in the child and the undeveloped adult. But inasmuch as the science as normative is distinctively reflective, it will be found that the function of critical reflection will have a larger use in ethics than in any of the material sciences.

We are now in a position, I think, to consider the question how far, if at all, ethics can be treated as a natural science. We have seen that the normative character of ethics results from its reflective character. Ethical choice is a function of reflection, and this translates it into a teleological, an ideal-seeking, activity. The possible relation of ethics to natural causation would not arise, then, within the reflective activity itself, but rather out of the relation of the reflective to the spontaneous in experience. It is here, I say, that we are to seek a function of natural causation, if it is to be found at all. Now there is a widespread belief that genesis is always a function of natural causation, and that ethics, so far forth as it can be genetically treated, will fall completely under the dominion of natural causation. It is to this belief, mainly, that is due the extreme reluctance of many ethical thinkers to admit any vital connection between ethics and evolution. The presumption is that evolutionary ethics means the ethics of natural causation. This presumption is strengthened also by the fact that the most influential exponents of evolutionary ethics take this very position and deny freedom in the interests of natural causation. But a little reflection will be sufficient to show that genesis and natural causation are not inseparable, that in fact they are separable and we have distinguished examples of their separation. The history of any form of theory, for example, will exemplify an evolution that is determined by the laws of logical sequence rather than by natural causation. It would be absurd to suppose, for example, that the development of modern political economy since Adam Smith had been determined

mainly by natural causation and not by the reflective study of economic conditions. Again, the development of philosophical theory from Socrates to Aristotle, or from Kant to Hegel, while it was no doubt vitally related in an indirect way to spheres of natural causation, was actually determined by the laws of consecutive logical thinking. Growth and development may be spiritual or logical in their character and in the laws which they obey, as well as naturalistic and under the law of natural causation. What we say here, then, is that the spheres of evolution and natural causation do not necessarily coincide, and that when we have admitted that ethics has a genetic aspect we have not to that extent admitted its subordination to the law of natural causation. The question as to the scope of natural causation would still be open and can only be settled by investigating it on its own merits.

That ethics has a genetic aspect is scarcely any longer a debatable question. The genetic psychologists, and especially the students of child-psychology, have not only shown that there is a process of growth in the ethical conceptions of the child, but have also been successful in a measure in indicating its main stages and some of the important conditions of its growth. The results of genetic psychology are confirmatory, moreover, of the more general representation of race-progress which we derive from history and the historical sciences. In this race-progress ethics has shared, and such a writer as Lecky in his *History of European Morals* has shown that, on its practical side at least, as part of the life of humanity, morality has passed through the stages of an evolution. Let us suppose, then, that in some real sense the principle of evolution has been exemplified in the history of man's ethical experience. It will follow that we shall find certain universal categories of the evolution-process as a whole, exemplified here as elsewhere. Now these categories are development, heredity, variation, and selection, and the question here is,—How does the history of man's ethical experience exemplify these

categories? It will not be necessary to treat all the categories in detail, since if there has been real development it must have taken place through the agencies of selection and variation, and the whole question of the nature of the evolution would be determined by our conclusions regarding the nature of selection and variation as ethical categories. It seems clear that the whole issue is at stake here. Taking the category of variation to begin with, it is clear that the whole fortune of evolution in general is staked on the occurrence of variations. What, then, is a variation in ethics and how does it arise? We have seen that social variation in general arises as the thought of some individual and that it is in its initiative an individual function; not only so, but it is a function of thought or reflection. There may be, and no doubt are, social variations that are spontaneous. But among men the ordinary fruitful variation is the product of somebody's reflection on the social situation. It will arise in the effort to improve conditions that are at present unsatisfactory, and the variation will appear as the embodiment of the individual's thought of betterment and will take the form of some social programme to be realized. Now, we have seen that ethical experience arises as a function of the reflective social consciousness. There can be no question, then, as to the ethical initiative whether it be spontaneous or reflective. More distinctively than in the case of the ordinary social, it will be the function of some individual, and it will be a reflectively conceived programme proposed as an ideal of conduct to reflection. Thus when Jesus said to the harkening Jews, "Ye have heard it said, Thou shalt not commit adultery..... But I say unto you whosoever looketh upon a woman to lust after her hath already committed adultery with her in his heart," he supplied a representative instance of the ethical variation and the mode of its rise. It arises as the programme or pronunciamento of some individual or small group of individuals, and it is enjoined as a new ethical concept or, as in the case here, a

new interpretation of an old one. Allowing for indefinite change of circumstance and conditions, the law of ethical variation may be said to be exemplified in this instance. Under this law, however, all sorts of variations may arise. It is broad enough to cover ethical precepts all the way down from the sublime instance cited to those of Mother Jones and Coxey of our own time. Where there is free variation there must be selection in order that there may be rational progress. What, then, is the nature of *ethical selection,* and how is the function exercised? We are here touching one of the burning issues of ethics. We know how Huxley stirred the moral world by denying the ethical character of natural selection while maintaining that ethics is the product of evolution. Now, Huxley was right in regard to natural selection, provided his assumption be true that natural selection is an affair of natural causation. If this be true, as is indisputably the case in biology, then the principle of natural selection is clearly non-ethical—if not anti-ethical, as Huxley maintains. But in order to avoid mere verbal difficulties arising out of differences of terminology, we should say that the vital issue here is a question of principles. Is all selection a function of natural causation or is it not? And if not, what is its principle? We feel when we get the question stated in this way that we are on solid ground. In the study of social selection we found that the unmodified concepts of biology are not applicable, and for this reason, that social selection is not only a function of consciousness but also of some form of conscious reflection. When Jesus was speaking to his audience they no doubt felt their hearts burning within them. This was the immediate response of the moral intelligence of the group he was addressing, in the intellectual labor of trying to understand the new interpretation. Using the terms of evolution, we may say it was the effort of the group to accommodate itself intellectually to the new proposal. But this does not represent the whole process of accommodation. Only when the new

idea leads to a new resolve,—to a change of will and practical attitude that insures a change in conduct,—has the process of accommodation completed itself. Now, this process of accommodation is all the selection that is exercised. If it fails to take place or acts in an opposite direction from the suggestion—which is possible—the variation is rejected, or at least not taken up, and fails to become fruitful. If we study the situation, we shall find that the steps involved in this act of accommodation by the individuals of the group are as follows. The prescript of the individual comes, in the first place, as a suggestion to the intellect, and its selection will involve, (1) the effort to understand the suggestion. The suggestion must be translated into a "self-thought-situation" as a condition of the possibility of any further progress. (2) Having reflectively mastered the suggestion in some intelligent thought or idea of it, the next stage is the one in which the experience becomes ethical on the part of the listening group. The new interpretation comes not simply as a representation containing a piece of information; it comes also as a prescript. The matter that is asserted in the proposition is one that, through the intellect appeals to the moral consciousness, or to the conscience as we now shall call it. And the moral fate of the proposition will rest on the response of conscience. But the proposition will also make an appeal to the desires. The programme it proposes will doubtless seem too difficult to what we may call the natural man. His carnal impulses and desires, at any rate, will be dead against it. What we are making out here primarily, however, is the fact that the moral suggestion will appeal not only to conscience, but also to natural desire. And the result of this double appeal will be the rise of the typical ethical situation. For there are just two alternatives that can arise: either conscience and desire will agree or they will disagree. The first alternative, which must be admitted to be the more rare, is one also out of which little fruitful insight can be gained. Were all life smooth sail-

ing it would not occur to any one to take deep soundings. It is only the case of disagreement that supplies fruitful instances. Now, we may define conscience as *will determining itself by duty,* and desire as *will determining itself by the agreeable.* It is clear that the idea of duty and that of the agreeable may conflict and that they do conflict. In the instance of the new interpretation of the moral law, the situation will doubtless be that of conflict. The carnal man at least will rebel and this rebellion will be shared in by the sensuous nature of the individual and the sensuous tendencies of the community. But conscience will *assent* to it, and this assent will carry with it not only the moral approval of the individual but also that of the conscience of the community. The assent that turns the prescript into an obligation to both the individual and the community will be the individual's and the community's *accommodation* to a new idea of duty. The moral assent which transforms the prescript of external authority into internal obligation and duty is thus identical with the process which on one side we call selection, on the other, accommodation. The dilemma out of which it arises,—that of a conflict between the moral and the sensuous natures,—lifts it mentally above the level of spontaneity into that of reflection and makes it certain that the debate out of which the decision is to come will be, on the part of the individual and community, an affair of reflection and deliberate choice. For in the very nature of the case, while it might be possible for both the individual and the community to be reformed without knowing it, it would be absurd to suppose that moral reformation could come to either the individual or the community through any other channel than that of its intelligent choice.

Similar conclusions await us when we come to consider the problem of moral heredity. We are not concerned here directly with those congenital physical conditions which tend to induce predispositions or tendencies in the mental field. The indirect bearing of the biological on the social

and ethical is recognized, and we shall have something to say about it in another place. But we have seen that social heredity is a very different thing from physical heredity, that there is little in it analogous to the congenital in biology. The social inheritance is simply the patrimony of institutions, laws and instruments of culture which one generation hands down to the next. And the only security it has that this patrimony shall not be wasted or ignored altogether, rests in the fact that its life overlaps that of the new generation long enough to enable it to translate its riches into an actual possession of the new generation. Beyond this function of education, a large part of which lies outside the field of the new generation's intelligent assent, there can be little doubt as to the fact that the new generation's relation to its social inheritance is not in any vital sense analogous to the congenital inheritance of physical characteristics. For these exercise their influence outside of the province of the will, whereas the new generation chooses what shall be the effect of its social inheritance. It may neglect the larger part so that it lies fallow and does not influence the life of the time. It may exercise the selective function and assimilate a part, and then we shall witness a living development along special lines. Besides, part of the legacy which past generations have neglected may be restored and revived and then we shall have one of the frequent renascences of history. It is impossible, then, to exclude will from social heredity and reduce it to a pure phenomenon of natural causation.

Much more will this be the case in moral heredity where the issues come much more directly into the province of conscience and will. For if we leave out of view the indirect effects in the moral sphere, of congenital physical conditions, we shall find that there is no such thing as the transmission of moral ideas except in the form of literature and institutions, and through the medium of tuition. We come into possession of no moral ideas congenitally, but these come to us so far as we inherit them at all, as a

patrimony the use of which may be largely determined by our own will. And the fact that reflection and will enter so much more distinctively as factors wherever a moral effect is produced, than they do into any other kind of a result, is sufficient to make it clear that the volitional cause will be the determining one wherever a distinctly moral result is attained. We conclude, then, as the outcome of this part of our discussion, that the direct forces of moral evolution are those of conscious and volitional agencies and that nowhere does the process fall completely into the hands of natural causation. This was found to be measurably the case in general social evolution, but it is more especially true of moral evolution where, in view of the characteristic nature of ethical phenomena, they belong more distinctively to the species of reflective activities.

I think we have reached a point here where some intelligent conclusion will be possible on the general question of the nature of ethical science. Putting the questions in what sense and how far ethics can be treated as a natural science, if we identify a natural science with a science of natural causation we shall be led to the following conclusion. Ethics can be treated as a natural science only so far as it falls *indirectly* under the influence of natural causation in connection with biological heredity and the influences of the physical environment. We have already spoken of the influence of biological heredity and need not enlarge. It is scarcely open to dispute that the physical environment, by its direct influence on certain conditions of consciousness (temperaments and moods for instance) will exercise an indirect influence on conduct and will to some extent affect moral experience. Through temperature, habitat, food supply and relative ease or difficulty of procuring the means of subsistence, the nature of man is being constantly modified.

Conditions of the bodily organism outside of those due to congenital causes also exercise a more or less constant and a more or less potent indirect influence on the sphere of

conduct. They do this through the influence they exert in determining the will which is always susceptible to motives from these regions, as well as by the part they play in determining the emotional point of view from which we react upon life. They may be able to account for the whole difference between despondency and elation, moods which give complexion to life by altering the relative force of motives and interests. It is clear, then, that in so far as the issues of moral conduct are *indirectly* determined by natural causes operating through biological heredity or the physical environment, it may be treated as a natural science. Having reached this conclusion, our opinion as to the limit to which natural science may go in dealing with ethical phenomena will be determined by our judgment as to the importance and extent of the influence of these agencies.

Now, it must not be forgotten that the question of the limit of natural science in the treatment of ethics is not identical with the question of evolution and its scope in the moral field. For we have just concluded that the concepts of genesis and natural causation are not identical, but that genesis and history may be found in regions where natural causation does not directly apply. And carrying out this view, we have seen how a doctrine of moral evolution may be worked out in which the direct determining forces are reflection and will and not natural causation; moreover, we have seen in detail how the categories of selection, variation, heredity and accommodation become real categories of moral progress when we construe them in terms of reflection and will. Clearly, then, there is a genetic science of ethics that transcends the direct limits of natural causation and looks for its results to the operation of forces that are teleological rather than mechanical. This is the reason why the genetic treatment of ethics, when it gets clear from the superstition that has bound it to natural causation, harmonizes so well with the categories and spirit of the normative branch and becomes

so tributary to its results. A doctrine of ethical evolution founded on concepts that have been developed critically in the light of moral experience itself will be found to be just the complement that the normative science needs.

We turn now to the question of the metaphysics of ethics. The question as to whether there can be a science of ethics apart from transcendent considerations may now be regarded as settled. We do not see where else ethics can be rooted except in the social nature of man. And if it has its root there, then a science of ethics becomes possible. If, then, there be a metaphysic of ethics, it will not come as a rival candidate for our favor in an effort to displace or discredit science. That conception of metaphysics may be consigned to the limbo of exploded superstitions. If a place be found for a metaphysic of ethics it will be because some ethical problems still survive which science is unable to answer; or, if you will, to which a scientific answer is impossible. And that is no discredit to science, inasmuch as it is simply admitting that there are problems,—it may be of a very pressing nature,—for which no answer can be reached that will bear the kind and degree of certitude for which science stands. We have seen, however, in earlier chapters of this treatise that there are ultra-scientific certitudes of a very high order, and the faith of metaphysics is that the answers to these questions may be brought under some of these. We may approach the metaphysical problem from several different points of view. One of these points of departure, and perhaps the most important, is found in the central category of ethics, that of *duty* or *obligation*. We have seen that the immediate roots of the notion of duty are social, and that the obligatoriness of the fundamental ethical notions, as justice, truthfulness and honesty, is an immediate deduction from the form of sociality itself. We find, however, in dealing with the social world, that there is a point where the social movements transcend the ordinary forces of social organization, a point where the partial movements merge into the

world-movements as a whole. In view of this it was seen that, in order to redeem the whole social world from the ultimate reign of accident or blind fate, it was necessary to connect it with the intelligence and purpose of some eternal consciousness which is capable of comprehending and ordering the whole. Here in the ethical field we meet a corresponding alternative. It is found that all communities are limited and partial and that accessible forms of social consciousness are therefore relative, and if relative, liable to change and modification and not infallible. We know, of course, that the ethical virtues, being immediate deductions from the essential form of sociality that repeats itself everywhere, are generalizations from data that are accessible to us. Yet the fact that the social order itself contains no absolute guarantee of its validity but must have recourse ultimately to some metaphysical ground—this fact, I say, so affects whatever depends on the social as to introduce contingency and render it at last relative. What shall be done in the case of a dilemma like this? Just one of two things; we may throw away our faith in the social order and, as a consequence, in the moral order, as did the ancient sophists who chose the only other alternative open to them, a world of social and moral accident where only the strong had any chance to survive and attain their ends and where all law was simply a convention of the weak; or, choosing to retain that faith as the only ground of reason and order to be found in our world, we may be led to the opposite alternative of seeking a cure for ultimate relativity which is ultimate chaos, in the postulate of an *eternal* consciousness, a *divine* reason and will, in which our relative norms find their completion and ultimate justification. We hold that a metaphysic of ethics developed from such a point of view rests on grounds which science itself must recognize as rational, whether or not it may see its way to accepting the solution. Moreover, science too has a relish for going to the bottom of things and finding the truth in some startling

antithesis. What antithesis could then be more startling than the discovery we have made here that, in the last analysis, our intelligence in facing a world of moral issues finds itself in presence of two radically opposite alternatives, and that there is no middle ground. It must either find a *divine intelligence* in the world as the ground and guarantee of its moral order, or it must dismiss that order as a figment of imagination and take its part in a systemless and lawless chaos where only the strength that is able to push all obstacles out of its way has any chance of attaining its end.

Another point where the metaphysical alternative arises is in connection with the relation of ethics to natural causation. We have seen that those who treat ethics as a natural science draw the logical conclusion, as a rule, from this point of view and deny freedom as a *vera causa,* claiming that choice is purely an affair of physical cause and effect. Even the most refined theorists of this school, who treat the relation of motive to choice with great subtlety, are never able to transcend the notion of a motive as a cause acting externally to the will, which it determines to action. The notion of causation by self-determination seems to be unthinkable to them, and while in every normal choice of their own they have a conscious instance of a result that is determined not by the push of a cause which is transcended in the effect but by the pull of the effect itself which comes into a state of self-realization; they are unable to put two and two together and discover that what is self-realization in the effect is self-determination in the process. The metaphysical alternative does not arise directly out of this problem of the form of choice, however, since this is a question of competence in the sphere of a properly scientific issue. It is not impossible that the most bigoted opponent of freedom might be brought as the result of sufficiently competent analysis to admit that choice is self-determining in its form and, therefore, formally different from ordinary causation. But this would not be sufficient to convince him

that, notwithstanding the difference of form, choice is not after all reducible to a case of natural causation. It is here, then, in connection with the question of the ultimate conditions of choice, that the metaphysical alternative arises (I have called it a metaphysical alternative because, as I am about to show, there is another choice possible by means of which metaphysics may be avoided altogether). Let us take the position of those who have been so much impressed with the reign of natural causation as to be able to find no other form of agency in the universe. Regarding the physical order of events in time as the only real order and denying the reality of the order of consciousness; or at least treating it as an epi-phenomenon of the physical, the sovereign disposer of all issues in their view is natural causation. When it comes to the problems of conduct these theorists are disposed to put all solutions in terms of environment and heredity. These are the major forces which really determine all the issues, and these are taken in their biological and physical sense as embodying the main lines of the operation of physical causes in so far as they bear on human conduct. If we identify ourselves with their point of view, we shall begin to realize the force of their reasoning. From the outer physical standpoint, it does seem that, in comparison with the operation of physical forces, no other kind of agency is worthy of serious consideration. Viewed in relation to the physical forces, a man's conduct seems to be the function of what he eats and of the material agencies that enter into and affect his physical constitution; his general reaction upon life depending on his digestion; his conscience-reactions being functions of his liver, and his ability to think straight a function of the condition of the brain. The brain distils thought as the cool surface in the warm atmosphere distils dew. That is all. Given a sound bodily organism in a good environment and connected with favorable congenital conditions and you have the entire causation of man's

thoughts, feelings, purposes and actions. His conduct is an effect of which these are the only real causes.

Now whatever force there may be in this mode of representation, it is clearly one not open to us who believe in the reality of consciousness and have accepted the Copernican revolution which it brings into the world. If consciousness be real, then it is competent to become a *vera causa* in the world. We have seen how the recognition of the reality of consciousness leads to its enthronement in the primary seat of power. It is either all or none with consciousness. And we have followed the evolution of the world under the supremacy of consciousness up to the point where, in the form of the ethical choice between the right and wrong, it throws down the gauntlet to the physical forces in its definite assertion of itself as a *vera causa*. We thus come back to the pivotal point of freedom as true causation. And the whole representation from the standpoint of the physical concentrates on this one point, the denial of freedom, or at least the denial of its efficacy. And when we follow this denial back to its original sources, we find that it ends logically and in fact, in a view of the world in which the reality of consciousness in every sense except as an epi-phenomenon is denied. We have our choice, then, and here are the real alternatives which lie beneath all compromise, between two different and inconsistent views of reality. Either the real is a system of physical forces, which exclude consciousness altogether from their determinations and in which consciousness can be at best a helpless spectator;[1] or, it is a system in which consciousness holds the primacy, grounding the physical itself which stands for a form of agency that is not generically different from its own, and reaching in its ethical judgments and decisions the clearest and most definite

[1] Huxley accepts the true logic of this view when he reduces man to the state of a conscious automaton in which consciousness merely spectates the physically determined movements of the human mechanism.

assertion of its causal efficacy. We have these alternatives before us and a choice here must be final, for when consciousness uses its prerogative, either to assert or abdicate its own reality, there is no higher court of appeal to which the case could be taken. The ultimate choice is between matter and consciousness as the final term in reality, and in casting in our lot with either alternative we are to understand that we accept with the choice the whole logic of the situation.

Let us, then, understand that if we take the material alternative, we have planted our primary faith on that which we never have known or can know to exist. We have nowhere any immediate touch of matter. And our mediate knowledge of it is through a symbol that does not reveal inner nature. Let us understand further that we are asserting matter to be the only real, in a judgment the whole validity of which depends on the authority of consciousness whose reality it nevertheless denies. These are epistemological considerations. We assert the agency of natural causation, which embodies the principle of physical efficiency, as the only real form of agency. Yet we do not anywhere reach any immediate realization of physical agency. We reach its definition partly through abstraction from conscious agency and partly through the analogies of conscious agency, and yet we are led to deny the reality of the *proto*-type in the interest of the reality of the *ec*-type. But all this inconsistency has been accepted with the alternative. These and other considerations which we need not marshal here are sufficient to determine the majority of men who reflect, in favor of the other alternative. Aside from other grounds of conviction, they will argue that since consciousness must be depended on, in the last analysis, to define our concepts and *criteria* of the real, its own reality cannot, except suicidally, be disputed. If, then, we are led to adopt this alternative and to regard consciousness as *primate* in a world of reality, we must also be prepared to accept the logic of the situation. Now I am clear

to affirm that one result of this logic will be that we are here obliged to become metaphysicians. This contingency has been faced and provided for all along the line of these discussions. But clearly it will have to be faced again in connection with the ethical situation. For if we examine the claims of those who seek to reduce ethics to a pure science of natural causation, it will be found that the main force of their position arises from the apparently greater sweep of the causes they assign. There is an obvious universality about physical causation, while the agency of consciousness seems just as obviously restricted. Consciousness apparently belongs to a corner of the world and is confined to a little segment of time, while the physical forces are cosmic in their extent. If it were not for this appearance of universality on the one hand and the lack of it on the other, the claim would lose much of its force. We have seen already in other connections that if we limit our view of consciousness to that of finite individuals, it will be impossible to account for the world-movements as a whole, since these transcend the limits of finite foresight and purpose and thus seem to be given over to accident and blind fate. The appeal has been to a *transcendent* and *eternal* consciousness whose thought and purpose would be adequate for the movement as a whole. And here in facing the difficulties of the ethical situation something of the same kind becomes necessary. Intrinsically, we cannot deny that ethical choice is a *vera causa* without invalidating the whole ethical situation and without taking a fatal step toward the denial of the reality of consciousness in the world. But when we attempt to equate the finite ethical with the physical and material, we are confronted with the characteristic dilemma, the threat of the physical agencies by virtue of their apparently greater sweep and their manifest transcendence of the control of the finite consciousness, not only to encompass but also to swamp the ethical and reduce it *perforce* to a condition of dependence on the physical. It is in order to ground freedom, then, as a

vera causa that there is a demand here for a metaphysics of ethics, and this metaphysics will take the form of an appeal to an eternal consciousness, now in the garb of a supreme and all-comprehending ethical purpose in which the ethical purposes of finite individuals shall be included and conserved, and which at the same time shall supply the universal under which the world-forces as a whole may be unified and subordinated to conscious direction.

Now we have only to combine the two sets of considerations, developed from the two vital ethical categories, obligation and freedom, in order to realize the reality and the strength of the grounds on which a metaphysics of ethics rests. And we have in conclusion only to complete our synthesis in the ethical field in order to be convinced that it is only when science and metaphysics combine their forces that the problems which the moral consciousness sets can be solved. On the one hand, it is only when we recognize both the social and the transcendent roots that a true doctrine of obligation and duty can be developed. On the other hand, it is only when the agency of a transcendent will and purpose is recognized in connection with the finite agency of man, that freedom can be maintained as a *vera causa* and the ethical situation prevented from falling into the hands of purely physical forces.

CHAPTER III.

EMOTION AND RATIONALITY.

We do not need to preface this chapter with any proof of the fact that feeling and emotion are real forms of consciousness. If they did not commend themselves as such to our immediate intuition it would be impossible to deduce them by any form of logical proof. Feeling and emotion are given elements of consciousness. But that does not preclude the possibility of their analysis and perhaps their definition. The time has passed when students of psychology were tempted to overlook the feeling elements in consciousness. It is now the volitional that is under fire, and the attempt is being made to reduce the consciousness of volitional effort to a kind of fringe of sensation that accompanies the motor-adjustments of the physical organs. We might ask, why not permit the motor-adjustments to have a consciousness *inside* of them, and if not, why should they be found enjoying the luxury of a conscious fringe? Such milliner's frippery does not seem to comport with the dignity of the real business of experience. But we are not holding a brief for volition,—at least not in the present stage of our discussion. The case for feeling requires no brief, since its claims as a real aspect of consciousness have been admitted. But the caption of this chapter indicates a connection in which the rights of feeling are yet under discussion. The tendency to distinguish sharply between feeling, and reason, and to regard the latter as ultra-emotional, has become

so habitual that the proposition to incorporate feeling in the constitution of rationality represents a variation of a somewhat startling character. But as more than one voice is raised in favor of its selection, we do not despair of the movement of accommodation necessary to its adoption.

That the pleasure-pain quality of consciousness is original and underived may be assumed without debate. There can be no deduction of feeling. We know pain and pleasure because we have felt them, and for no other reason. The pleasure-pain reaction of consciousness is not to be identified with its cognitive reaction. But then again, it is not to be separated from it. What we find, on analysis, is that cognition and feeling are very closely interwoven in their roots, and the question arises whether, in the last analysis, cognition be ancillary to feeling, or whether the reverse relation be the true one. It would seem that the answer to that question depends on the end which the process has in view. If the process be a cognitive one, it will be found that feeling mediates it as a primary motive. It is in relation to practical activities that cognition becomes instrumental and feeling takes the initiative. This latter is an ordinary form of experience. Something occurs which pains or pleases us directly, and this experience supplies a motive to cognition which develops a representation, defining the cause of the experience in some mental symbol that serves as a guiding motive in future action. This symbol, through its association with the pain-giving or pleasure-giving experience, has the power of arousing what we may call the feeling-memory—that is, the recollection of the pleasure-pain suffered in connection with the object—and this feeling-memory in turn stimulates a volition-movement, the effort to appropriate or repel. Thus our pleasure-pain experience supplies a primary motive to cognition and also the practical aim under the stimulus of which the cognitive activity will be led to continue its symbolizing and defining efforts.

In a chapter on *The Aesthetic Categories* in my

Foundations of Knowledge, it is pointed out that the secondary qualities represent the specially emotional aspects of things, and the reason given for this is the fact that the secondary qualities are more subjective, more immediately functions of feeling, than the primary, which are more objective and more immediately functions of the will. This will require some further elaboration here. When we say that the secondary qualities are more subjective because more immediate functions of feeling, we point to a very important property of feeling itself; namely, its subjectivity or self-reference. All feeling is self-feeling acting under some form of objective stimulation. After the very first experience indeed, we may qualify this statement and say that all feeling is self-feeling acting under some form of objective representation. More pronounced even than in any other form of psychosis, do we find the tendency in the feeling-psychosis to wrap itself up into a self. But the point here is that this wrapping-process is always connected with some form of objective representation. And the special fact of interest is the more pronounced or emotional character of the secondary qualities. This will no doubt lead us to the discovery that the secondary qualities owe their greater emotional character to the fact that they appeal directly to feeling, while the primary qualities; bulk, extension, etc., appeal only indirectly through the will. The primary qualities, as we have maintained in earlier chapters of this book, are directly related to the will as symbols of that which rebuffs or satisfies its own energy, and through the will, only indirectly to feeling. The secondary qualities, on the contrary, have an emotional quality in themselves. They are pleasant or painful to the sight, hearing, taste, touch or smell, and thus carry with them an original appeal to feeling made by a first stimulation. Now feeling stimulates self-consciousness more directly than any other form of mental activity. The tendency of consciousness to become self-conscious only becomes fully active in response to

objective stimulations of feeling and especially in response to the stimulations of the secondary qualities of objects.

We come, then, to a more special examination of the emotion-psychosis as a preliminary to the problem of its relation to the principle of rationality. We have spoken of the feeling-reaction as if it always continued to be a simple reaction of pleasure or pain. But this has been proved not to be the case. Pleasure-pain is no doubt at first a simple experience, but what we call emotion is complex. The pleasure or pain we experience from the secondary qualities of things is mediated, it is true, by cognition; we must perceive the quality. But it is the immediate presence of the quality that gives the pleasure-pain experience. Hence there is little complexity here. But in the case of emotion proper, a very important element in what we may call the emotion-complex, is the *idea.* This idea may be a cognition, in which case its power will be due to associated elements. But it is generally a representation or thought in which some situation is conceived that is adapted to calling forth a variety of feelings, perhaps of various kinds. Thus the special emotion we are experiencing may be that of homesickness, and the idea that calls it forth may be the representation of some situation in which the home life will be vividly brought before our imagination. Now this representation in the different details of it will no doubt arouse, to some extent at least, a variety of simple feelings, but none of these will be the emotion proper. Nor will it, as a rule, be any blending of these elements. The emotion of homesickness will be our *personal reaction as a whole* upon the situation thus presented. An emotion proper is never a simple feeling of pleasure-pain. It is never a complex of simple feelings of pleasure-pain. It is the result of a feeling-reaction of the whole self which is present in the experience, upon a situation the elements of which have the power of calling forth various simple feelings. I do not know whether the

psychologists of feeling have sufficiently noted this, but it seems to me to be a fact of major importance.

Our analysis of an emotion has resolved it into a feeling-idea that calls forth a feeling-reaction of the self as a whole. And it is to this character of the emotion, the fact that it is a reaction of the self as a whole upon some feeling-idea, that it owes not only its peculiar relation to self-consciousness but also its value, as we shall see later, for objective knowledge. The bearing of emotion on self-consciousness follows as an immediate deduction from its nature. The self-reaction as a whole will be a reaction in which the whole load of the objective will be thrown back into consciousness at once. The present self is forced by the situation to live the whole experience over again, and there it stands objectified before it. Necessarily the reaction will be that of remembered joys and sorrows, mingled with the sense of present deprivation, and these elements will lead in turn to our projecting the whole into the future as an object of longing. Thus the feeling of homesickness arises as a mingling of anticipated joy in the future with a sense of present pain and deprivation. Let us then define an emotion as a *self-reaction as a whole upon a complex situation, either pleasant or painful.* This will sufficiently distinguish it, on the one hand, from a simple feeling, and on the other, will enable us to develop its connection with a rational doctrine of the world. We have made it sufficiently clear, I think, that the emotion-psychosis is not simple but very complex, involving not only a variety of simple feelings, but also a complex mental representation. The idea, as we may call the mental element, is the eye of the emotion. It is that which reveals to consciousness the interesting situation, the self-reaction upon which constitutes the emotion. But the emotion-psychosis is also related to volition. We have seen how simple interest-feeling supplies the motive of volitional activity. Now emotion is similarly related to the volitional activities, but not so simply. The emotion is a self-reaction upon the

idea of a complex situation as a whole. This in turn stimulates the will, but complexly rather than simply. What is the aspect of my emotion that gives it the power to stimulate volition? We saw that the emotion was a self-reaction and that it reacted upon a situation which at the same time embodied for it a desirable ideal and brought painfully into consciousness the sense of its present deprivation. The self of the emotion is, therefore, a self whose consciousness is synthetic, including a sense of the pained, deprived self of the present, along with a sense of the satisfied self of the ideal. And the emotion itself is simply *the movement of the self as a whole, away from the pained and deprived self of the present toward the satisfied self of the ideal.* The self thus emotionally identifies itself with the self of the ideal in which it is to find its satisfaction. Now, such a motive stimulates the will by supplying it with an ideal of self-completeness standing in conscious contrast with the imperfect and unsatisfied self of the present. The volitional activity which arises in consequence will be a movement from an unsatisfactory present to a satisfying ideal both terms of which are in consciousness. We have here every element of a reflective situation presented, and it is clear that in *emotion* we have come upon the *form of reflective feeling.* Going back in our analysis with this added insight, it will be found that the distinction between spontaneous and reflective feeling will arise exactly at this point and that emotion will always stand for a reflected form of feeling.

Moreover, the result that we have here attained is of great value, not only as enabling us to fix more clearly the status of emotion, but also as aiding us in determining the fundamental categories of the emotional consciousness. These we have determined, in the chapter on *The Aesthetic Categories,* in *Foundations of Knowledge,* in an argument that is not repeated here, as *individuality* and *unity.* Substituting the term *personality* as representing the distinctively emotional aspect of individuality for individ-

uality itself, we have as the fundamental categories of the emotional consciousness, *personality* and *unity*. Now the analysis of the present chapter will shed some further light on the *rationale* of this result. Emotion is a reflective form of feeling and arises as a self-reaction upon a complex situation that presents as one of its features a gap between the actual and the ideal. It would not be possible to conceive circumstances more favorable for the development of a personal reaction, that is, for the development of a reaction which would be characteristic of the self as a whole. In every such reaction the self is coming to itself in a characteristic attitude and is making a characteristic objective exhibition of itself also. The personality of consciousness thus expresses itself more pronouncedly in emotion than in any other type of experience. But we said also that the foregoing exposition sheds light on the category of *unity*. We have shown how the emotion arises as a reaction upon a contrast which appears between a present experience and the representation of a past experience which in this instance is transported as a whole to the future and idealized. It is not necessary in all cases, however, that this bodily transference from past to future should take place. It is only necessary that experience should supply the elements to the imagination in order that the synthesis of the ideal may be completed. The points of importance are that the synthesis is effected and the idealization takes place and that this idealization is not so much the product of the intellect as of the imagination acting under lively emotional stimulus. Now, objectively considered, the process is not so much one of ideal self-realization as it is a *unification of experience*. Objectively there is a breach between the actual and the ideal and the unity is restored in the healing of this breach. The emotional demand stimulating the imagination leads to the representation of an ideal unity, in the sense of the wholeness and completeness of which, full satisfaction is found.

How, then, do these categories of personality and unity

become incorporated into the constitution of the principle of rationality, or, as it has been called historically, *sufficient reason?* In the chapter above cited on the *Aesthetic Categories*,[1] we have gone into details in order to show how the emotional demand for unification incorporates itself with the presentational and dynamic categories leading to an ideal completion of the world under each of these categories. Simply stating results, we may say that the aesthetic requirement leads, as we pointed out, to a threefold application of the principle of unity in the spheres of the mathematical, the physico-dynamic and the aesthetic, consciousness. The point of vital interest in this connection is the fact that the emotional demand acquires epistemological value when it coalesces with the categories of knowledge, inasmuch as it is only under the emotional stimulus that the scientific ideals of knowledge are developed to completeness. Now in any field of knowledge, the structural categories represent the standards of rationality in that field. In the world of cause and effect the principle of causation will formulate the law of reason, and when this principle is conceived ideally, as it will be under the stimulus of the emotional demand for unity, it will formulate the law of sufficient reason. What is true of cause holds also of any other structural principle of knowledge. And this unity-demand, which coalesces, as we have seen, with each category in order to unify the content of experience in its special fields, will also express itself in a general demand which will take the form of a reaction upon the content of experience as a whole. Or, if we define reality as the realized content of experience, it may then be said that this unity-demand arises as a reaction upon the world of reality as a whole. This will be the final form which the requirement of unity will take, and inasmuch as its partial embodiments constitute the highest principles of rationality in the several spheres of its application, we

[1] *Foundations of Knowledge.* Chap. IX, Part II.

find here that its reaction on the whole of reality embodies itself in the principle of the highest rationality.

We have concluded that the principle of rationality arises out of a synthesis of thought and emotion, and here we undertake to exhibit something of the method of this synthesis. It has already been pointed out in the *Foundations of Knowledge,* but will be restated here, that the final test of representation or feeling is *congruity.* If the representation or thought be *congruous* with the representation-complex that constitutes the body of formed experience, it will then be accepted as true and assimilated into the body of formed knowledge. Moreover, if the new feeling or emotion be congruous with the emotion-complex that constitutes the formed body of emotional experience, then it will be accepted and assimilated. In both cases congruity is the test of acceptance, and that congruity expresses itself either in the satisfaction of the logical demand for agreement among the parts of the representation-complex, or in the satisfaction of the feeling-demand that there shall be harmony among the elements of the emotion-complex. The intellectual congruity thus consists in that form of agreement which arises out of the comparison of representations or ideas, while the emotional congruity is found to consist in that feeling of satisfaction which arises out of the comparison of elements of emotion. The two congruities lead to what we may call agreement and harmony, respectively. And the question here is whether these two congruities are to be regarded as entirely distinct standards of the real, or rather, as standards which, however much they may actually diverge, and even in appearance at least, become hostile, yet tend to coalesce in some point of ideal synthesis. We have taken the affirmative in *Foundations of Knowledge,* but assume the privilege of rearguing the case briefly at this point. The fact that it is the same consciousness that makes both demands, creates a presumption at the outset, in favor of their final unity. But setting this presumption aside for the present, we find that the

experience, so long as it remains concrete, includes both intellectual and emotional elements. These may be separated by abstraction, however, so that we are able to speak intelligently of the cognitive and emotional elements and processes of our experience. Again, the experience that arises within consciousness may be distinguishable as intellectual or emotional. But it will be found that our thoughts arise customarily out of some medium of feeling in which they have been acquiring warmth, while our emotions on the other hand have arisen out of the cold bath of the intellectual medium. There is no such thing as thought purged of emotion, or feeling purged completely of intellectual elements. The truer representation of consciousness is one, I feel sure, in which every psychosis is conceived to be a complex of elements,—feeling involving idea and representation, while thought involves feeling or emotion, the difference arising from the fact that in the thought-psychosis, feeling is subordinated to the interest of thought itself, whereas in the feeling-psychosis, thought is tributary to the interest of feeling. In the concrete there is none of that separateness which we achieve in our abstractions.

Moreover, when we consider the real situation, we find that it is the same world of content that calls forth both reactions. The botanizer may be temporarily oblivious to the emotional proprieties when a strange flower confronts him on his mother's grave, but it will be because the system of thought-relations which his trained intellect is able to trace in the flower has aroused an emotional reaction that is strong enough to temporarily suppress memory and association. Here we have a system of intellectual relations becoming an emotional object in the most direct sense. Again, it is possible for the artist in presence of the emotional object, say the "flower in the crannied wall" which Tennyson immortalizes, to become so impressed with the thought or thoughts which it symbolizes as to give these an emotional expression in some other form of art. The poet thus finds the thoughts suggested by the little flower an

emotional object that clothes itself in the emotional vestments of beautiful verse. Moreover, the mathematician, the least emotional of men, *qua* mathematician, will find his symbols becoming emotional objects in his hands, not solely by virtue of some extra-mathematical suggestiveness, but because of the harmony of relations and the ideal of unity to which they directly lead. Thus again the thought becomes a direct emotional object. Pure music, on the other hand, rests on a system of intellectual relations which when brought out by the physical expert have power to inspire emotion of a very marked intensity altogether apart from their musical associations.

The conclusion to which these illustrations point is strengthened by the fact that congruity is everywhere an emotional object. The fact that diverse elements are fitting together, no matter whether the elements so fitted be the parts of a machine, the members of an intellectual system, or the elements of an emotion-complex, gives rise in all cases to an emotional object. The other side of the case we are arguing here is that this *congruity* is everywhere an object that satisfies the intellectual interest. If congruity as such makes a direct appeal to the emotions, its appeal to the intellect is just as direct, and while the intellectual interest is satisfied only with the agreement of representations in a thought-complex, and the emotional interest only with the harmony of elements in an emotion-complex,—while, I say, this is true, it will be found that in the harmony of the emotion-complex the satisfaction of the idea is implicated, while the satisfaction of feeling is involved in that which meets the requirement of the intellect.

The above results are directly in line with the conclusions toward which we are tending, namely, that in the notion of *unity* the *two congruities blend and unity becomes at the same time an intellectual and an emotional object*, and, in fact, is the one notion in which the intellectual and the emotional are ideally realized. We do not find ourselves

able to determine whether unity be more true or more beautiful, more satisfactory to the intellect or to the feeling, the fact being that it is the ideal requirement of both truth and beauty. Let us now assume that the proof of the final synthesis of thought and emotion in the category of unity has been completed, and let us turn to the other side of the emotional situation. We found this in the category of *personality*. For while feeling tends to unity of content in experience, it also tends toward individuality of self-expression and culminates as we have seen in personality. Now it is in this category of personality that we find the complement to the universalizing quality of the notion of unity. The notion of unity, in the abstract at least, is that of the falling together of parts and the *Aufhebung* of pluralities and distinctions. We have seen, however, that, intellectually, these distinctions must receive recognition. The world is a plurality of existents, and, taking the standpoint of the primacy of consciousness in the world, these existents are translated into the terms of conscious, or at least psychic, individuals. The type of individuality itself is found in self-consciousness and particularly in that form of it which is involved in the central agency of volition. Were we to be asked where the principle of individuation is to be found, we should answer, in the same place where we go to look for the type of individuality itself. If the type of individuality can be found only in self-consciousness, then its principle will be to seek in the central movement which self-consciousness reveals. This is the movement of self-determining volition. It is the type of individualization everywhere, and whether our problem be that of determining the individuality of lower forms of existence, or the distinctively metaphysical problem of the ultimate spring of individuality in the world of reality as a whole, we must revert to this type as a point of departure.

Let us say, then, that the form of individuality, so far forth as it defines itself to thought apart from distinctive emotional influence, is that of *self-determining volitional*

activity (which we have seen to involve the idea as one of its elements); we may then ask what is the corresponding individuality in the field of the emotions, and our answer is, *personality*. We are not concerned here to carry the analysis of personality further than we have already carried it in another connection,[1] except at one point which is of essential interest here. We have shown in the general doctrine of personality that it lies in the sphere of plurality and variation in the conscious life of the individual; that, given the individual existent, endowed with consciousness, it is possible for it to embody itself in a variety of forms, more or less persistent, of conscious reaction as a whole. These conscious reactions as a whole are what we call personal reactions and their types are determined by the threefold nature of the fundamental psychoses which may be in form intellectual, volitional or emotional. But the variations within these types have an indefinite range. Also the possibility exists of co-existent or alternating personalities in the same individual existent. Then there is the debatable field of possession which involves the possibility of one personal existent entering bodily into another and taking temporary charge of its housekeeping. Personality is thus a specializing function of emotion by virtue of which it introduces the warmth and interest of variety and contrast, of specific reference and immediate touch, into experience. But personality is not an unlimited or unqualified principle of variation and contrast. It is limited on the side of conscious individuality; it must be an expression of the conscious existent *as a whole*. In other words, a whole self must embody itself in this personal form. The variations of personality are not absolutely unchecked, therefore, and do not go so far as to disrupt individuality itself. There can be no person where there is no self, and wherever there is a self there is an individual existent.

[1] See *Foundations of Knowledge. Part II, Chap. II. Categories of the Subject Consciousness.*

We may take it, then, that personality is the individuality of thought and will, qualified emotionally, so that it is able to fit better into the sinuosities of a variant experience. Personality, or rather the process of personalization, will express for us the principle of individuation when it has been emotionally qualified. We are ready now, having determined the presence of the synthesis of thought and feeling in the principles, alike of individuation and unification, to proceed to the determination of the form of the principle of *rationality*. Let it be understood that we do not regard anything as completely rational that does not satisfy our whole conscious nature. If it satisfies the intellect but leaves the emotional world in chaos, it does not embody a completely rational situation. How, then, shall we state a principle of rationality that shall be adequate to every legitimate demand? It seems that there is no other way open than to seek a principle that will satisfy the intellectual and emotional demands of both personality and unity. Now such a principle must be derived from some such analysis of personality and unity as we have given here. We must reach a concept of unity that will conserve both the intellectual and the emotional congruities, and we must reach a notion of personality that will conserve the oneness of individuality and the variations of real experience. Having achieved these, we shall further recognize the fact that our principle of rationality must include a synthesis of the requirements of both personality and unity. We then reach the following statement: *A completely rational conception of Reality is one in which the combined requirements of thought and feeling are ideally met by a principle of unity that has its spring and type in the oneness of conscious individuality, uniting with a principle of individuation that includes while it grounds and limits the variations of personality.*

Taking this as the statement of the principle of complete rationality, the mode in which it will apply as an ultimate criterion and test is obvious. What we are seeking in any

field of experience is some criterion that will help us to determine what kind of a result may be taken as ultimate in this field. Thus in the field and limits of natural science where natural causation is the principle of explanation, a result could be regarded as ultimately satisfactory that would fit into a system which had been completely unified under its principle. If there were any province of natural happenings that had not as yet been brought under the law of causation, the situation would be regarded as so far irrational. Again, no situation in this field could be regarded as completely rational that did not involve the connection of its phenomena with underlying grounds or substances. Of course phenomenalism denies this, but from the standpoint of these discussions phenomenalism is not completely rational. Or, taking our illustration from the metaphysical region, when we have taken the teleological principle of purposive action as the *vera causa* that is to explain results, the mere finite activity of that principle will never be able to completely satisfy the demands of rationality, inasmuch as it will always leave the world-movements as a whole to accident or blind fate. The requirement of rationality here is a principle that will include and organize the whole. Nor, again, would a principle be completely rational that should attempt to divorce unity from individuality, for we have seen that the unity of individuality is the type and model of all unity and that the world of unity must also be a world of individual existents. Pantheism would deny this, but from the standpoint of these discussions pantheism is not completely rational.

The conclusions we have here reached are conformable to some of the most characteristic results of genetic psychology. If we take the view of feeling and emotion presented by genetic psychology in its analysis of the emotional life, we find that not only have the feelings a history corresponding in its broad outlines with that of the intellect, but that feeling has played an important

part in making that history. Taking the two categories, habit and accommodation, between which the genetic history is distributed, the well-known conservativeness of feeling would possibly lead us to assign it mainly to the category of habit. It is probably true that feeling has more to do with stability than with progress. But the psychologists have shown that feeling is also a factor in progress. There is a circular movement involved in accommodation that carries feeling as well as intellect with it, and more than this, there is a boiling up of feeling which causes it often to overflow its banks and thus contribute directly to variation. We have feeling here directly stimulating thought and leading to steps in progress. Now psychology has shown how, through the dialectic of habit and accommodation, the mental life as a whole advances. It has been made clear in this connection how the criterion of selection takes the form of an ideal situation that appeals to emotion through thought and thus brings progress into direct relation with the emotion. The whole ideal of psychic progress,—that which determines selection and the goal and direction of advance,—is thus one that is qualified by emotion. Again, one of the most important chapters in modern psychology is that in which we have a detailed demonstration of the fact that the whole genetic history on its subjective side is one of the evolution of the individual self. And we have here an exhibition of the fact that in the evolution of selfhood feeling plays a co-ordinate part with thought. For the process by which the conscious individual becomes a *socius* and enters into the life of the community is one that is mediated from the beginning by what may be called an emotional copy. There is thought, of course, but the copy is more than thought. It is thought qualified by feeling and stimulated by feeling. The very essence of sociality is, therefore, more emotional than intellectual, taking the form of sympathy and its opposite. But the lesson we wish to extract here is that in the representation of modern psychology sociality

begins with an emotion-stirring copy of its other, while in the determination of its goal it reaches the concept of a community, the life and unity of which is due to the individuality pulsating at its heart.

CHAPTER IV.

RELIGION.

ONE of the important results of the sociological discussions was the conclusion there reached that the individual is something more than the social organism; that he is the bearer of interests and demands which the social organism is not adequate to satisfy. These interests and demands may be designated as ultra-social, and the questions, what their ground in consciousness may be and what further stages in the construction of the real they lead to, will be the topics of the chapters that follow. If we ask for proof that man is more than a merely social being and that his nature contains ultra-social roots, this proof can be found in its most unmistakable form in his religious experience. Now, in speaking of religion as ultra-social, we do not mean to imply that it is not vitally related to and rooted in the social nature of man. We hold, on the contrary, that religion has social as well as ultra-social roots; and it is only in respect of its most characteristic feature that it transcends the limits of experiences that are purely social. Man must already have become a *socius*, in some sense, and responsive to the motives of sociality before he is in a position to be genuinely religious. "If ye love not your brother whom ye have seen, how shall ye love God whom ye have not seen?"

On the other hand the fact that the developed religious consciousness involves the feeling or idea of an object

which, though in some vital respects like ourselves, is yet in important regards also transcendent, and not to be completely subsumed under our social categories, is one that is not open to serious debate. The vital point regarding the religious consciousness is whether this feeling or idea of the transcendence of the object of religion has original grounds in man's nature, or, on the contrary, is to be regarded as a pure product of development. We have in mind here those theories of the rise of religion which seek its original springs in the primitive man's experiences of ghostly apparitions or in the visions of dead ancestors and other phenomena that are reducible to purely humanistic terms. We are not disposed to deny that such experiences are calculated to *stimulate* the religious nature and may thus represent forces in the evolution of the religious consciousness. But it is pertinent to ask regarding such methods of explanation, whether the causes they point to would ever be sufficient of themselves to *produce* a religious sense in a consciousness that by hypothesis does not already possess the norm of religiousness. In order to deal with such a question intelligently, it is important that we should distinguish between those conditions of any kind of experience which taken together constitute its potentiality, and those more external conditions that merely stimulate its development. It is easy enough to see how the causes to which these theories call attention might serve as important and perhaps as indispensable conditions of the development of the religious consciousness, provided an original germ of religiousness be presupposed that could be stimulated and nourished by such food. If this original possession be denied, however, it is difficult to see, for example, how a dream about a dead ancestor should have any more effect in developing religion than a dream about the living. Why should the image of a human personage in a dream lead to inferences of the *super*human? If the dream itself contained the vision of something superhuman, or supernatural, then the tendency of the primitive man to

believe in his dreams might account for the origin of his religious belief. It is more reasonable to suppose that these visions would have a more direct bearing on the primitive man's beliefs about his own soul, its existence and immortality. Moreover, it will be conceded, I think, that the dream, whatever its substance might be, would have to be taken up by the primitive man in his waking moments and reflectively adjudged superhuman before it could have a permanent religious significance for him. Even the savage mind will not fail to distinguish between the merely strange and unusual and what it deems to be supernatural. In other words, the savage mind would not be wholly destitute of the germ of a distinction between natural and supernatural; one that would not be altogether coincident with his distinction between the usual and the strange or unusual. What he adjudged supernatural would be a wonder of a very unusual kind, like an eclipse, and one that would overawe his mind with the appearance of power that was not only mysterious but also superordinary.

These considerations will be sufficient, I think, to convince the reflecting mind that before generalizing on the external causes of religion we ought to investigate more carefully than the average anthropologist has done, the psychological roots of religion in the consciousness of man. The time has long passed by since it was safe for the student of religion to neglect psychology, but this has not always been recognized; with the result that much otherwise good anthropology is spoiled by the lack or the unsoundness of the psychological presuppositions which underlie it. We propose here to institute a search for the original roots of religion in the human consciousness, and in the light of the results to point out what we deem to be some of the shortcomings of the current anthropological theories of its origin and development. In the first place, however, let us try to reach some intelligible conclusion as to the *idea* of religion and what it involves. We are not seeking to

define here, but simply to determine what it is in a religious experience that makes it a truly religious and not some other kind of experience. Of course, religion will have its ritual and its institutional features which outwardly differentiate it from other external forms of experience. But back of the ritual and the institution will be the religious consciousness. That thought- and emotion-complex, which we call the religious consciousness,—what is it? I think we shall be led to say, after looking over all the results of investigation into the religious ideas of the lowest savages, that the idea of religion could not arise in the experience of one who had not in some way become conscious of relatedness to some mysterious being outside of himself that impressed him as being superhuman; that is, free from some of the ordinary limitations of humanity, but that, notwithstanding, was in many respects also like man himself,—a being of his own order, yet in a sense superordinary. (It is in this synthesis of the *ordinary* human and the *superordinary* that we seem to find the pith of the consciousness that may be called religious.) Let us attempt to cancel either factor, and religion vanishes, leaving in its place either the purely social or a mere sense of mystery that does not know whether to be religious or not.

There must be, it seems to me, so much of an *intellectual germ* in religion in order that it may exist at all; and this I say with some diffidence because, if I understand a position that is held by some eminent thinkers of the present, it is that religion has no original intellectual content, its primary substance being purely instinctive or emotional, and its ideas being symbols that do not rest on any primary content of representation. The claim, however, that religious ideas are symbolic, does not rob them of all primary intellectual content. A symbol will define vaguely and indirectly, if not directly, and it will convey some real meaning. The symbol in the mind of the savage, while perhaps it carried no intuition, would indirectly characterize the hidden object. Thus in the case of the

fetich, the stone or the ring would be the symbol of some being that the savage is interested to propitiate, and the eclipse would represent some terrible and all-powerful agent. If so much defining power be allowed to the symbol of religion, then I can admit that religious ideas are largely symbolic. But the doctrine of symbolism is not inconsistent with the presence of some original intellectual content in religious experience. If there were not this original content, it is difficult to see how the religious emotions could arise or possess any definite quality.

Proceeding, then, to determine the psychological roots of religion in consciousness, we shall consider *first* its intellectual ground. That the religious consciousness has a primary root in the intellect can, I think, be clearly made out. We must be careful here to distinguish the object that excites the religious consciousness from the conscious reaction itself, which is the savage's construction of the object. The latter, we claim, will not only be what he feels about it, but also what he thinks about it. There can be no social experience without some form of social cognition, and there can be no religious experience without some species of religious cognition. If the sense or feeling of the transcendence of the object of religion be primary to the religious consciousness, then we cannot escape the conclusion that the idea of the object will be implicit in this first experience as it is implicit in every form of primary sensation. Furthermore, historically, religious ideas seem to have arisen as early at least as any other species of intellectual content. We shall develop the position in a later chapter that man's first religious experience is a function of his objective consciousness and that it depends directly on a representation, or rather, a presentation, upon which the subject-activities of thought and feeling begin immediately to play. To deny to religion an intellectual content is to reduce it to pure subjectivity. But the subjective theory, as we shall see, is unable to account for the most characteristic feature of religion.

We shall find another and vitally important psychological root in the emotions. I say emotions rather than feelings in order to emphasize the fact that religion is a function of the reflective consciousness. I do not mean, of course, that spontaneity does not enter largely into religious experiences. But it is clear that the ground-symbol of religion arises as an interpretation which the savage mind puts on phenomena that might be construed in other ways, but not by the savage himself. The emotional root is a reaction upon this symbol and, therefore, primarily dependent on it. Now, feeling, as we have already shown, becomes *emotion* when it is a reaction of *consciousness* upon a complex situation. The elements of this situation will doubtless call up their appropriate feeling-reactions; the unusualness will cause surprise, the magnitude of it will call forth wonder, while the mystery of it will cause perplexity. But none of these, nor a complex of them, constitutes the religious emotion proper. They will be associates of it and will no doubt enter into it to qualify it, but the religious feeling proper will be, not the feeling-reaction upon the presented object, but upon *the construction which the savage puts upon this presented object;* that is, on *what he thinks it to be or to represent.* This is another point in religious theory on which we need to be clear. The religious emotion will be that complex of fear, respect, awe, veneration, submission, worship, that the manifest agency of the superordinary being to whom the savage ascribes these manifestations would naturally call forth. Such emotions as these would doubtless constitute the nucleus of any religious experience. But the savage, being a reflecting as well as an ignorant and superstitious person, would very soon develop around these *primary* emotions a cluster of *secondary* ones of a less purely religious character. These would be fear, terror, servility, or desire to propitiate, leading to the institution of any sort of charm or sacrifice that might seem adequate to appease the deity and turn away from him its power or disposition to do him harm. In short, the superstition of

the savage would not arise directly out of his religious emotions, but in connection with them, and would tend either to modify or suppress them.

We have been dealing with the ideal and emotional roots of religion. These, however, do not constitute its deepest spring in our nature. The intellect and the emotions play around some *object* to which man is more deeply related than through his mental and emotional reactions. Man in the exercise of *will* becomes an agent in his world, and it is through the deeper reactions of his agency upon an agency which transcends him that his fundamental religious experience arises, for it is in this that his sense of the transcendence of the object will arise and from it his own sense of dependence, or, speaking more truly, *helplessness,* will arise. This is perhaps the deepest root of religion, since it springs directly out of the interaction of man's will with the agency that he learns to call divine. Moreover, it is in connection with the deeper volitional reactions that we come upon the distinctly *ethical* roots of religion. The primary ethical consciousness, at least in its religious aspect, may be followed back to its root in man's deep sense of dependence on God, however the being he calls God may be conceived. For it is natural for him to look to that which has the mastery over him for the supreme law of his being. The sense of morality is in its roots very closely allied to the sense of power. It is only when we regard these roots of religion as acting together in consciousness that we can form an idea of the way in which the religious ideas and emotions emerge and develop in man's experience. The two leading processes in consciousness by which this is achieved may be called *personalization* and *deification.*

We saw in the preceding chapter how the emotional and the intellectual motives coalesce into a result which we called the *principle of the highest rationality,* and we saw how this principle leads to a synthesis of individuality and unity in the assertion of a unification that is grounded in individuality as the final form of unity in the world. We

also saw how the emotional synthesis leads to the qualifying of unitary individuality with the warmth and specialization of varying and plural interests. Personality, when it carries in it the germ of the unitary individuality of self, becomes the fruitful norm of all the analogies which we employ in determining the character of objective existence. Of course, the savage is neither a psychologist nor a metaphysician, but it is only when we have achieved an analyzed insight into the nature of personality that we are able to put into terms of our own thought what the savage actually does in his simplest religious reflection. His personification is not identical with *deification* in any sense. This latter is given in the first experience that determines the object as a superhuman or transcendent being or cause. The personalization completes the task by transferring to this superior object the attributes and prerogatives of our own personality. The personalization means that we put the deity in our own place, as it were, where he stands in like intellectual and emotional attitudes to his world as do we ourselves, and by virtue of this, naturally comes into the same relationships and holds the same prerogatives. Only, he is deity, a superhuman and supernatural something, to start with, and so becomes a superhuman and supernatural self, and therefore a superhuman and supernatural person. The personification and deification are two distinct processes and must be accounted for, therefore, on distinct grounds.

This leads us to consider specially the religious root of the deifying process in religion. It is what I call the sense of transcendence. I am not disposed to accept Max Müller's faculty of sensing the infinite, but point to it here as an example of the recognition of what I call the root of transcendence. There is that in what we call the sense of transcendence, which I think we shall find, in the last analysis, to be inexplicable. In this, however, it is not altogether singular, for in every act of cognition there is what Professor Ladd calls the "trans-subjective reference" and which he

regards as an ultimate fact of cognition. I have endeavored to show in my *Foundations of Knowledge* in the sections on the *Categories of Knowledge,* how the categories bridge the gulf between subject and object by exhibiting the synthetic character of combined subjectivity and objectivity, but in different aspects and in performing different functions. The exhibition of this character, however, shows it to be irreducible to anything simpler than itself, and in that sense, therefore, inexplicable. We take it, that the feeling of transcendence is in this sense inexplicable. It is there as a fact and we must accept it at its face value. But it is not difficult to exhibit the kind of experience that stimulates this feeling and brings it into clear consciousness. In tracing the grounds of religion, some thinkers have fixed upon the *feeling of dependence* as its primitive source. But I venture to maintain that the fact of religion, involved here, is not the mere sense of dependence. We have the feeling of dependence in connection with our social others. We have it with reference to the branch we are standing on. We have it, too, with reference to nature, and here it comes closer to the religious feeling. The fact of the religious feeling is not so much the sense of dependence, as the feeling that with reference to the deity we have no standing in existence at all apart from him. That the grounds of our existence transcend us is our profoundest feeling. We are not always thinking of our existence, but we are assured that God is always thinking of it and so it is maintained. We do not know what will be good for us, but we are assured that God knows, and the good will be secured. I am not saying that the savage goes through any such reflection, though it is very simple and a child understands and is satisfied with it. My daughter Margaret, who is twelve, comes to me and says, "Papa, we think we know so many things that will be for our good which turn out not to be so. How are we to know that our whole lives will not turn out the same way?" A pretty searching question,—to which I answer, "But God knows what is good for us, Margaret,"

and she goes away satisfied. I am not saying that the savage can reason as profoundly as twelve-year-old Margaret. His feeling that he has no standing in existence apart from the deity would, no doubt, express itself in two of his primal religious emotions, *respect* and *submission*, the latter arising in view of his helplessness as against the power of the deity; the former an ethical feeling or germinal conviction that this larger personality with the prerogatives has the *right* to command him. His respect is a kind of recognition and assent to the supreme moral right of the other being to command his obedience. Any savage could have these feelings in germ at least. From the religious point of view, then, the root of transcendence is the feeling of physical and moral subordination that arises in the mind when it contemplates the transcendent object which it calls deity.

Beyond the distinctively individual sources we find that religion has important grounds in *sociality*. There is an important sense in which religion is distinctively a social phenomenon, a product not of the individual but of the individual as a *socius* and as a member of a social community. We cannot say how far the isolated individual could go in developing a religious sense, for the simple reason that we cannot say how far the individual could develop at all apart from social conditions. It is probable enough that, were it possible for our individual consciousness to develop at all in a social vacuum, we might unfold some kind of a religious sense. But the whole situation represents a hypothesis of the illegitimate kind. What we know about conscious beings is that, genetically, they respond to social motives before they begin to respond to the motives of religion. The relation here to the religious and the ethical is a common one. Both ethics and religion belong to the reflective consciousness and arise relatively later than sociality. We distinguish here, of course, the institutional and ritualistic sides of religion in which it is purely social, from the religious consciousness

composed of feelings and ideas, which has ultra-social roots. We are here considering the social roots and have agreed that, in an important respect all religion arises out of social soil. This is a vague statement, however, and we naturally wish to know something about how it arises. Now, the social consciousness being first on the ground and having accustomed the savage to the recognition of other beings like himself, the religious consciousness would arise when this norm of the other-than-self consciousness found itself in relation with a transcendent object. The deity thus becomes the transcendent other than self, or the transcendent other self. No doubt the savage does not think in these terms, but he thinks in simpler terms that we may call the progenitors of these, and that lead to the same result. When we say then that religion, in the sense we are using the term here, has roots in sociality, we mean that a social analogy—that of the social other—is involved in its very foundations. The object of religion is thus a modified type of the social other, and the modification is wrought by the function of the principle of transcendence. We see, then, how transcendence and sociality are interwoven in the very foundations of religion.

In this part of our discussion we distinguish, of course, between the two phases of religion, by virtue of which it is on one side an element of personal and social experience, and on the other, a public affair of ritual and institutions. The latter, which is almost the only one considered in Mr. Spencer's treatment, we do not deal with directly here, though we expect to have something to say about it later. But it will be admitted that religion as a personal and social experience presents the more fundamental aspect. If there were no personal and social experiences of religion, there could of course be no ritualistic and institutional religious life except, perhaps, as it could be developed by pure fraud and priestly jugglery. At all events, it seems clear that an adequate theory of religion must be founded on a true analysis of the religious consciousness.

Returning, then, to the question of the roots of religious experience, we have now traced the principal psychological and social elements. But we have not as yet completely exhausted the theme. It is of course recognized that there is a very important ethical content in religion. So little is this in dispute that the tendency with some is to claim that the whole legitimate content of religion is ethical. This was first the contention of Kant who, as we know, approached the religious problem from the standpoints of ethics and epistemology. But more recent thinkers are setting forth the same doctrine as a dictum of psychology. Now, I am prepared to admit that a large part of the most vital content of religion is ethical, but I am not ready to go Kant's length and say virtually that religion has no other province than that of a feeder to ethics, and no other content than matter of duty. The position we are maintaining here is, however, in favor of some ethical content. For we maintain not only an ethical content but also an ethical root of religion. It is not probable that man would have sufficient motive for the development of vital religion were this ethical root extracted from his consciousness. What, then, is the ethical root of religion? In our analysis of ethics we have found that it is largely the product of the reflective consciousness. Its central pressure-point is that of the *ought* of duty. This ought pushes itself up into the field of reflection and the judgment to which it gives rise is a reflective judgment. It is also a decision of will which, in view of the fact that it rises out of the conscious opposition of desire and obligation, becomes a *vera causa* and marks the epochal point at which human conduct passes from the control of natural causation and becomes the function of freedom. I am not free in a transcendental sense, when I decide, and at the same time determined by natural causation. But I am determined by natural causation when I follow the pull of desire in preference to the injunction of duty, whereas, I am free and decide according to the law of freedom when

I obey the law of obligation. In any middle field where the two forces pull together or in a neutral field where no pressure of duty is felt, the issue of freedom would scarcely arise; for as we have already maintained, the question of freedom is one of idle speculation except where the alternative of obligation is present.

The ethical root of religion is unfolded in that act of investiture by which the savage clothes the transcendent object with the vestments and prerogatives of his own personality. The consequence is that the object becomes an ethical personality, not only clothed with moral attributes but bearing moral prerogatives. We have seen how, in general, obligation can only maintain its absoluteness by metaphysical reference to a supreme, all-comprehending personality. And here the transcendent object or deity stands to the savage as the *supreme*, whose right it is, therefore, to command and be obeyed. Hence his respect and submission, which are his ways of assenting to the law of the higher personality as obligatory. Of course, we do not at all think that the savage would go through all this reflection, but after all, when we think of it, is there any simpler way of interpreting what he does, than this? The ethical root of his religion is thus to seek in the ethical personality which he ascribes to his deity, and this root not only sprouts into its appropriate ethical qualities but imparts an ethical complexion to the whole divine character.

Few religionists would be satisfied, however, with the Kantian reduction of religion to the position of a mere surrogate to morality. They would claim for religion interests and motives that are extra-ethical, and in that position we are prepared here to extend them aid and comfort. There are roots of religion that are not distinctively ethical, and one of these is distinctively aesthetic. That there is an emotional content in religion all theorists are at one in claiming. A religion without feeling would be no religion at all. Even Hegel's "thinking is also worship," is no exception to the rule and was not meant to be

so by Hegel himself. Sometimes the claims for emotion are extreme, as in the case of the mystics and pietists of all grades. Even so sturdy a moralist as Matthew Arnold defines religion as "morality touched with emotion," recognizing at least an extra-ethical content. What is maintained here, however, is that there is a distinct emotional root in religion, and when you ask me to say what it is I answer, *personality*. In ethics it is the *form*, the *law* of personality that commands and exacts obedience. But the content is in the background, whereas in religion, while the form impresses the will, the rich content appeals to the feelings. Why? Because personality, as we have seen, is an *emotional* category. It comes to us charged with feeling, and we instinctively love it because it is sweet, or admire it because it is beautiful and worship it in the "beauty of holiness" because it is altogether lovely and satisfying. When religion appeals to us in its personal concreteness with all the rich content of a freighted conscious experience, do we marvel that it has power to arouse other emotions than the ethical, or that it has power to infuse unwonted fire into the ethical emotions themselves? Not only has religion a distinctive emotional root, but it exercises a function which we have seen to belong to emotion in general; namely, that of stimulating the intelligence to the development of new religious ideas. We have seen how the coalescence of thought and feeling leads to the idea of the highest rationality. Now, there are certain ideas in religion which have always been regarded as in some respects at least ultra-ethical. Of course, the idea of God involves ultra-ethical conceptions. But aside from that, what is admitted to be one of the final conceptions of religious experience,—the idea of the unification of the human and the divine; and the idea of mediation, the means of effecting this unification,—has at least ultra-ethical aspects. The notion of personal identity with the source of the law is an ultra-ethical conception. If we dissociate the idea of mediation from that of expiation,

with which it has nothing intrinsically in common, it becomes simply the vicarious notion of some common medium in which two otherwise separate personalities come together and coalesce. Mediation thus represents the dramatic side of unification.

That these are almost purely emotional ideas, or at least that they are emotion-inspired ideas, becomes apparent when we consider the types of religion in which they are prominent. In the lower forms of religion we should expect to find them present but so complicated with other elements as in most cases to be hardly recognizable. But in more developed types, in Judaism for example, where the vital element is the ethical, we find the idea of unity scarcely showing itself and mediation almost submerged in the notions of expiation and sacrifice; whereas, in Christianity, which gives more scope to feeling, we find the ideas of unification and mediation reaching their climax in the mystical conceptions of St. John. The emotional thus not only contributes important roots to religion, but also elements of content that are ultra-ethical.

We have been thus elaborate in tracing the grounds of religion in various regions of conscious experience, for two reasons mainly. In the *first* place, it is not usual to attempt an exhaustive treatment of such a subject with anything like the insight into the nature of the problem that is needed in order to insure fruitful results. Such inquiries have, as a rule, been left to two sets of persons; either to anthropologists whose knowledge of religion as a conscious experience may not have been very profound and whose dominating interests are altogether secular; or, to dogmatists of either the philosophical or theological type, who, without even a hasty analysis, seize upon one or two generalizations that seem to harmonize with their already determined points of view, employing these as substitutes for psychological and philosophic insight as well as for patient investigation. The consequence is an ever-widening breach between the anthropologists and the theologians in which

the former show signs of a somewhat decided drift toward materialism, if not toward atheism, while the latter are in danger of being brought to a complete standstill out of sheer inability to appreciate the living requirements of their problem. The *second* reason is one that will be more fully elaborated in following chapters. The insight that is needed in order to equip the contemporary anthropologist for his work will be defective and he will be in important respects a blind guide if he be not a man of trained psychological insight, and especially if he have not taken pains to become a practiced reasoner in many fields of thought. Moreover, while it is the fashion to denounce philosophy, the patient thinking that leads to philosophic insight will not be found by the student of religion to be the least valuable of his possessions. There are, no doubt, other elements that will be indispensable to his equipment; but of these we feel sure. The student of religion, in order to be ideally qualified for his work, needs to combine the insight of the specialist with the breadth of sympathy that come from a generous culture and a genuine interest in religion.

CHAPTER V.

ORIGIN AND DEVELOPMENT.

As regards the origin of religion, one of the vital questions which determine the lines of cleavage in theories is, whether man is a being of such a nature that the origin of such a phenomenon as that of religion in his experience is to be accounted for in a purely objective and experimental way. Shall we suppose that man came upon his religion as he did upon the objects of other great discoveries, such as the art of navigation or gold in Peru? And on this supposition, shall we regard the problem of religion as one of purely objective and factual investigation, a problem the terms of which are: given a situation in which religion does not yet appear as a phenomenon, to determine the objective phenomena from which and the process through which, religion appeared and developed as a feature of the history of the race? We may admit the possibility of such a method of procedure. In fact, nothing is easier to imagine. But the suspicion will inevitably arise here that it is altogether too easy and that the real terms of the problem include more than appears on the surface. Such a suspicion would be changed to certainty, I think, in the mind of one who had followed some such course of inquiry as that of the preceding chapter, in search of the roots of religion. We do not hold a brief for any special theory of religion, but it is clear that if the position of the last chapter be true and religion be grounded in conscious experience by

means of so many fundamental roots, then we must look for important subjective and psychological data to supplement the purely objective data on which current theories seem disposed to rest their case. If we occupy the general philosophical ground of this discussion, asserting the reality of consciousness and its primacy in the world, then, having by investigation discovered that religion is rooted in various ways in the depths of man's consciousness, it will follow without question that no theory of the origin and growth of religion which neglects these roots can make any reasonable pretensions to adequacy. But on the other hand, on the supposition that consciousness be regarded as a pure phenomenon and not as a *vera causa;* even then the subjective roots, if they be shown to exist in consciousness, could not be overlooked with impunity by any one who is investigating the origin or growth of religion.

Now the views as to the origin and development of religion among men, so far as they have definitely formulated themselves, may be classified under two heads, (1) what may be called the anthropological theory, inasmuch as it has received the endorsement of those anthropologists who have held the balance of power in their science, (2) the theory or theories of those who hold that the origin and development of religion are a legitimate object of scientific investigation but who for various reasons dissent from the anthropological theory. Among the anthropologists we may rank such names as Huxley, Spencer, Tylor, Brinton, while in the opposing school among those who dissent from the anthropologists on other than theological grounds we have Max Müller, psychologists like James, and more recently, Andrew Lang. It is not my purpose here to take sides, but rather to develop an independent criticism taking its departure from the results of the investigation into the roots of religion in the preceding chapter. The most convenient method of developing that criticism will be in a review of the anthropological theory in which we find the

issues most clearly stated or at least suggested. What, then, is the body of theory to which the name anthropological has been applied? We answer that it is that body of conclusions in which a number of investigators of divergent views, and prosecuting their work for the most part independently of the trammels of the schools, have been found to substantially agree. These points of agreement will, moreover, be found to lie around three main centers, (1) the data and origin of religion, (2) the processes and stages of its development, (3) the significance of the movement of religion.

The data with which the anthropologist starts are obtained by constructing the status and environment of the primitive, pre-religious man from a comparative study of the savage religious man of the present. This is the nearest approach that can be made to the original sources. For while it is a debatable question, with the weight of authority against it, whether any non-religious savage tribe can be found in existence at present, yet even were such tribes existent we could have no assurance that their lack of religious ideas was due to insufficient development. It might be due to race-stupidity. Taking the low races of savages and investigating their religious ideas and beliefs and customs, certain generalizations are reached signalizing certain common features which recur generally in, and in connection with, the variations that mark different forms of savage belief. Having by this objective investigation extracted what they regard as the common features from the variant religious experiences of the savage life of the present, the anthropologist is in a position to construct a theory of the rise and development of religion among primitive, pre-religious men. And it is clear from this that from the same data the theory of the primitive, pre-religious man himself will have to be constructed. Let us ask, then, (1) what this theory of the primitive, pre-religious man is, and (2) what are the main features of the theory of his religious history? The first

question is capable of a very simple answer. Taking the lower savages whose religions have already been generalized on the basis of their minimum of common content, these savages are supposed to have been in their primitive state substantially as they are now, except that they were absolutely without religious ideas or beliefs. It occurs to very few of the investigators that stripping off the religious elements involves an all-around disrobing, so that the primitive, pre-religious man, when we thus find him, will be perhaps as widely different from the lower savages as we know them now, as these are from the most civilized and cultivated races of the present. In fact, the anthropological method is not sufficiently critical at this point. In order to avoid misleading analogies, the investigator here needs to reduce the presumption with which he sets out, by conceiving the primitive man to be different from the modern savage, not simply in his religious ideas, but in the whole make-up of his being. It would be safe, I think, to start with the presumption that to be a *man* at all, and not a mere animal, involves the ability to have some ideas of some sort. I mean by that, that so long as we conceive his life to be one of pure spontaneity without reflection, our proto-man could only be regarded as perhaps an unusually gifted animal. He would need to be able to seize upon some thought, some objective representation, and turn it around reflectively, before he could realize even the germ of the man-life. Let us suppose, now, that this primitive being whom we have divested of religious ideas, has been divested also of reflection. We have in him a gifted animal at a stage of highly developed spontaneity where he is ready to break the crust and come through into the light of reflection. How does he get through? Why not through a unique *variation?* The genetic psychologists have familiarized us with the doctrine of the *genius*, the gifted individual of his class, as a bearer of social variations. The first genius in any race or civilization would be a social variation that would bring in something new. Why should not the first

variation that marks the breach through the crust of spontaneity into the life of reflection be one of a distinctively *religious* kind? It would not be a function of *any* primitive being, but only of the *genius* of his race or tribe. In short, we should expect this step to be taken by the most gifted rather than by the average specimen of the race. Now, if we go thus far, I do not see why we should refuse to go farther and say that the *first variation* of the reflective kind will be *religious*. The gifted proto-human would only find the needed stimulus in some impressive object in his objective experience, say in the terrific play of an electric storm, or in some unusual appearance of the heavens, say an eclipse of the sun in midday, or some great convulsion of nature, that would knock him completely out of his ordinary reckoning, and force him into the distressing position of having to seek a new mold of habit for his objective experience. We do not need to go into details; but the sudden and violent arrest which his spontaneity had received would lead to a return wave of conscious-reaction upon its source, the disquieting phenomenon, and it would be this rather than any form of subjective experience that would be the first *object* of reflection, or we might better say, the first reflected object. Now, if we consider what the reflecting of this object would mean to the primitive proto-human, it will be clear that it is in this or some such experience that he would achieve his *human status*. The experience would be to him a reflection in which for the first time in his life he becomes aware of two things coming together into one conscious act, (1) the spontaneous inference of which we have found the ordinary dog capable, by virtue of which an effect in consciousness is referred to an objective existent, and (2) the representation of the unusual objective experience which reflection has translated into the *kind of a symbol which naturally calls forth the religious feeling in the mind of the savage of the present*. What we are maintaining here is the probability that the *variation* which marked the transition from the

life of pure *spontaneity* to that of *reflection* was one of the religious species, and that it was in the shock by which the proto-human became a man, that he also became religious. The first man would thus become the first religious prophet and we should have the origin of religion determined as identical with the origin of the consciousness that is distinctively human. *In other words, man would awake to himself and to his sense of religion in one and the same process; but in this process the objective would take precedence of the subjective awakening.*

Now we have no disposition to read any advanced reflection into these first stages of experience. On the contrary, we have been ascribing to this first human genius just one thing that is beyond even the ordinary dog. We are not deriving the *religious* from the *unusual, simply,* but *from that unique species of the unusual which we know calls forth religious feeling in the savage mind of the present.* The ordinary dog will not be a stranger to these objects, and they will have the power to stir in him a kind of dull wonder, or perhaps more positive emotions of fear, dread or apprehension. But he will lack the power of doing one thing that this proto-human finds himself stimulated into doing, that is, *to reflect his object and change it into a symbol of an unknown existent.* The first act of reflection will take this objective form, and in ascribing it to this proto-human as the variation that makes him a man, no advanced reflectiveness has been accredited to him. This might be admitted, however, without putting the religious construction on the first acts of reflection. We have only asserted probability here; but in view of the considerations urged it is not a bare probability but one fortified with a weight of evidence that with reflection becomes more and more convincing. It would be the most striking and impressive of objective experiences that would be most likely to have the power requisite to produce such an epochal effect as the beginning of reflection.

The second question, What are the main features of the religious history which the anthropologists construct for this primitive, pre-religious man? is coincident with the second main topic—the processes and stages of religious development—and the two may therefore be treated together. What are the stages and processes by which the religious history of the primitive man is built up? Looking over the field we might think that the voices represent nothing but a babel of confusion. We have the advocates of the ancestral-dream theory, the ghost-ancestor theory, animism, fetichism, and totemism; all falling down before their own favorite idols, and outwardly, Milton's expressive phrase, "Confusion worse confounded," would seem to be applicable here. But looking below the surface we soon find that there are certain points of fundamental consistency and that out of the *disjecta membra* a tolerably coherent theory may be constructed. For example, the ghost- and dream-theories are not inconsistent provided they do not set up the claim of exclusive origin. It would seem that a man might find the starting-point of a spiritistic construction in either the dream of an ancestor or in the apparition of a ghost. For what he would need would be a stimulus and an occasion for the personifying imagination which he would already possess in germ. In these primary experiences, the advocates of the theory agree, is to be found the origin of man's belief in spirits as beings that may live distinct from and even apart from the body. Ordinary dreams would be able to give the notion of spirits, while dreams of the dead would lead to the belief in the spirit's survival of the death of the body. The doctrine that traces all religious belief back to the belief in spirits, which had its origin in dreams and in ghostly apparitions, is called *animism*. It is held in common by men like Tylor, Spencer, Huxley and Grant Allen. But on the question of ancestor worship, only Mr. Spencer and Grant Allen, perhaps, are perfectly certain that all religion began with the worship of ancestors. Other members of

the school, like Tylor, while sure of animism, are willing to admit that primitive deities may enter through other doors than those of ancestral dreams.

If we admit that the primitive man attains his first notion of spirits in this way and also the first motives for gradually deifying some of these spirits, we shall have him brought, through such experiences, into possession, not only of the notion of spirits, but also of the distinction between deities and spirits like his own that never arrive at the dignity of deification. In short, he will find himself in possession of the germs of both a psychological theory of souls and a theological theory of the god or gods which he is led to worship. From this point of view it is easy to see how the stream of spiritism might develop along two lines that at the same time would be constantly intermingling; sometimes stimulating each other's growth, but more often acting as antagonizing or corrupting forces. One of these lines would be the distinctively religious and would include the movements by which the spirits that were to become deities would be selected out of the common herd of spirits and elevated to the divine dignity of the gods of the different tribes and nations. The other line would be humanistic or *quasi*-humanistic, and would concern the fate of the other spirits who were not fortunate enough to be chosen as deities. For the *theology* of animism is only part of its significance. It includes both a theology and an anthropology, and its anthropology is perhaps its richer part, inasmuch as out of it develops man's ideas of his own soul and of its destinies and the duration of its life. To the anthropological part also belongs without doubt a large part of the history of fetichism and totemism; the former providing employment for wandering spirits to which no particular body had been assigned until they were imprisoned in the particular fetich-symbol which might be a snake or a piece of wood, and assigning to them a function in the lives of individuals; the latter, totemism, attaching to beings that were family-spirits in their origin but gradually grew to

tribal proportions and became the arbiters of the tribal divisions of land and of civic law and order in general. It is clear, I think, that while Mr. Spencer may find his dream-ancestor theory weak in the presence of such a development as fetichism, it is on its native heath when totemism is under consideration. But both fetichism and totemism belong more to the anthropology of animism than to its theology, though the two theories intermix, and the totem, while it always possesses social and civic sanctity as the symbol of law and order, yet only sometimes has a distinctively theological significance as a symbol of the deity. The totem may or may not symbolize the god or gods of the tribes. The fetich, on the other hand, while it is commonly an object of more or less superstitious regard, is more often without theological significance than with it, for it is the exceptional fetich that is regarded as a god.

Now if we combine the theology and the anthropology of the primitive man, we shall have a full vision of the rich heritage to which he has fallen heir. Starting without any spiritual possessions, his dreams and ghostly visions have supplied him with the germs of both a theology and an anthropology. He dreams himself into the belief in spirits, his own included. Some of his dreams give him the hint of free spirits, that is, of spirits living apart from these bodies. Ghostly visions confirm this with the apparition of spirits that are not associated with any particular bodies. Spirit thus becomes emancipated and takes its place in the savage's system of reality. But he has had dreams of his dead ancestor and these are strengthened by the waking vision of the ancestral ghost. Here his experience supplies him with the principle of *selection* in the spiritual world. For the ancestral spirits tend to develop into deities and thus to fill up the pantheon of his theology, while on the other hand to these spirits that are not elected to divinity, other lesser, though honorable functions are assigned. Some of them become devils and are

respected scarcely less than the gods themselves, but the rank and file have to content themselves with subordinate positions. They become sub-deities, never rising to the cardinal dignity; or they just remain finite spirits ready to undertake any office that may be open to them. That is probably the reason why so many of them become fetiches, though even in the case of the fetich it is said that it is possible sometimes to have an honorable ancestry. The better class of spirits will, of course, prefer to become totems, for this involves social and political dignity and a totem might even rank in some instances as a sub-deity.

We have pointed out that the animistic belief of the savage has both a theological and an anthropological section. But the savage does not succeed very well in keeping things distinct. His religion is a thing that includes them both; and many things that are not theological at all, but purely anthropological, have acquired religious sacredness and have a religious sanction attached to them. Moreover, the god of the tribe is apt to be a jealous deity and to be especially jealous of his prerogatives. His disposition will be to concern himself with pretty much all the details of the life of the individuals and the tribe of which he is tutelar. The *taboo* will thus arise and many things, in fact most things, will in some way or in some aspect of their use, have the injunction of the local deity placed upon them. An important part of the savage's education will consist, therefore, in determining what is taboo and what is not. The principle of taboo, which is simply that of setting apart for sacred use, and has nothing distinctively ethical in it, will be universal, and through it the mantle of religion will gradually be extended over all the affairs of life. The savage's world thus becomes peopled with spirits, and the savage comes to regard himself as in a world of spirits in which the fundamental line of cleavage takes place between himself and his associates, the men of his own tribe or nation, on the one hand, and on the other the whole multitude of free spirits, deities, sub-deities and

finite spirits which are related in various ways to his life and vitally influence all its issues. His religion, as we have seen, includes both his theology and his anthropology, and these rest at the basis of his personal, social and political life and institutions.

But within this complex, which arises on both sides of this line of cleavage as we have indicated, and which sets man himself over against the spiritual forces of the world, would spring the *soteriological* problem of the savage, the problem of his own spiritual well-being and the means by which it is to be secured. The savage might not have a very profound conviction of sin, but he would feel his own helplessness and the necessity of working out some *modus vivendi* in his relations with the spiritual world. His animism, which we have seen to be spiritism, would prompt him in this direction from even a deeper motive than that of safety. The same forces that lead him to people his world with spirits in general would lead him to a belief in his own spirit and to entertain certain aspirations as to its life and destiny. He would not realize the universality of death as does the civilized man and would be disposed to regard it as a kind of penalty that may be remitted. He is, however, in the habit of seeing people die and yet has learned to distinguish between the soul and the body and to believe in the power of the soul to exist apart from the body. Death is a possibility, —nay perhaps a common fate,—which only the gods can remit if they will. This conviction of a separate life of the soul leads the savage to various degrees of belief regarding the future world and the continued existence of the soul, the history of which constitutes the natural history of the belief in immortality. This belief so far as it exists,—and it is said not to be quite universal among savage peoples,—would, in connection with the interests of the present life, form the basis of the *soteriology* of the primitive savage. He would desire the well-being of his own life, temporal and eternal, material and spiritual, as well as that of his friends. But in order to secure this he would have to take

account of the gods and the devils, if there were any in his creed, and of the other spirits which have power to do him good or harm. There would arise, then, that elaborate ritual with its priesthood and priestly observances, the sense of the need of propitiation and the sacrifices and other means of effecting it. In relation to the inferior class of spirits, inhabiting fetiches and totems or perhaps without fixed habitation, superstition would constitute its resources in charms, spells and incantations. The whole ritual, whether it concerned the recovery of a lost treasure or the soul's repose in the future world, would have a bearing on the general problem of soteriology and would be included in the savage's religion.

From another point of view, on the question of the place of polytheistic and monotheistic conceptions in the development of religious ideas and beliefs, the general consensus of the anthropological school may be stated about as follows. The primary stage of religious development could not strictly be called either monotheistic or polytheistic, since each tribe worships its own god or gods without considering the question whether there be in fact one or a plurality of deities. Max Müller thinks that this stage may be characterized as henotheistic, but he is somewhat of an outsider and his proposition is not taken very seriously. On the whole, the disposition of the school is to leave this earliest period without definite characterization. The first definable stage of belief, however, is polytheistic. On this point current anthropology is sure. Men believed in a plurality of gods before they believed in one god. They were able to conceive many deities and the world as being ruled by many deities before they were able to conceive it as under the rule of one deity. The method of reaching monotheism as held from Hume down to Huxley is one of selection and promotion. It ordinarily accompanies an advance in the complexity of political organization where several tribes or nations are joined into one. Either the gods of all are served severally or collectively,

or, the god of some favored tribe is chosen, and becomes the god of the whole nation, while the others are neglected and their worship dies out. Thus monotheism as an ethnic movement arises, as among the Hebrews. But only speculative philosophy is able to complete the monotheistic conception in the idea of one absolute being as the ground of all reality.

From still a third point of view the anthropological theory develops a positive doctrine. The ethical element in religion is a late arrival. Huxley is so sure of this that he confidently denies the ethical element in early Judaism. It is, in his opinion, a system of animistic belief founded on ancestral worship and made up mainly of the unethical notions of propitiation and sacrifice. Even Jehovah was not at first a god of righteousness, but was an original tribal deity which Moses, appropriating the religious ideas of Egypt, freed from tribal restrictions and elevated into the God of righteousness of the later scriptures. If this be the case with the Hebrews, whose religion may be distinctively characterized as ethical monotheism, then much more clearly is it true of all less ethical religions. Whatever place ethics holds in them now, they were originally unethical and acquired their ethical content at a comparatively late stage of their evolution. This, of course, is what a partisan of the animistic creed would naturally expect, and the whole theory of religion, as well as of its development, depends in an important sense on what one thinks of animism. If animism embodies the whole concept of religion, then the very method of its origin seems to remove it from any very vital contact with the ethical and puts its origin in a field of experience that is particularly open on the one hand to illusion and on the other to immoral superstition. If this be true, the earliest religions would be the lowest morally, and what might more naturally be regarded as a degeneration from any point of view other than this, would be regarded as a case of extreme antiquity and undevelopment. The course of religious evolution is there-

fore, in the *first* place, from the non-religious to the religious; in the *second* place, from mere indeterminateness, through polytheism by promotion and selection to ethnic and finally to abstract monotheism; and *thirdly,* from a non-ethical and in some respects immoral spiritism to a deity that is more or less adequately conceived as the God of righteousness.

In the foregoing sketch we have endeavored to give in broad outline the main lineaments of what may be called the current anthropological theory of the origin and growth of religion. Now, there are two methods of criticism, one of which would be to point out in detail what, from our point of view, seem to be the most serious defects of this theory; while the other, which we propose to follow here, consists in sketching the outlines of a view that we should deem adequate to satisfy all the legitimate requirements of a theory of origin. In the first place, then, in order to reach a conclusion regarding the origin of religion, it would be necessary to acquaint oneself not only with the facts of religious experience as they have embodied themselves objectively in the religious life of peoples, but also to make a careful and conscientious study of the roots of religion in the human consciousness. For it is inevitable that the subjective nature of man will be the major factor in the problem and that a psychological investigation of the religious consciousness will be all-important. Again, in determining the origin of religion whose object is always in some sense transcendent and superordinary, the psychological question ought to be considered as to whether man's consciousness betrays any evidence of possessing any superordinary organs or channels through which unusual knowledge may be acquired. At any rate, in considering the question of the origin of a belief in the superordinary, the possibility of the existence of superordinary means of information must not be excluded, unless we are prepared to beg the question at the outset by assuming that the belief whose history we are tracing is spurious. Tak-

ing the three alternatives possible here, (1) that the belief is spurious, (2) that it is genuine, (3) that the genuineness or spuriousness of the belief is not to enter as a presumption into the investigation, it is clear that the third attitude which best comports with the spirit of pure science could not exclude the alternative of possible superordinary means of reaching truth. Moreover, we have taken the ground,—and here we have the analogy of the best known movements in history in our favor,—that religion would probably originate, not as the outcome of some gradual process like the Lamarckian's use and disuse, but rather as a unique variation and as one that would be such by virtue of its new religious character. We have maintained that this is probable and that the variation would likely embody itself in a *genius,* or group of geniuses, rather than in ordinary individuals, and in this we have the support not only of history but of genetic psychology. Why should not the first proto-human that became religious have been a genius rather than an ordinary member of his tribe or race? The answer to this might be that in such a case the genius himself would become the god. But history is full of instances of prophets and seers who did not become gods. In fact, the ordinary function of the prophet is to direct men's attention away from himself to a transcendent deity, whom he represents. Thus again, to our 'why not?', may be answered, 'But why so? Is not your alternative a mere conjecture?' But such tilting is profitless. We have pointed out a possible mode of origin that has many recognized analogies in its favor and that is contradicted by no evidence that the anthropologists can find in the life of known savages. Furthermore, as to the primitive, pre-religious man with whom the anthropologist is dealing, he is a being who must be constructed largely by hypothesis; and we have shown at least one respect in which the hypothetical method has been faultily applied. We have claimed that in order to reach the primitive, pre-religious man, we must, going down the evolution scale, strip off not

simply all his religious experience, but also all the general development that has accompanied it. The result will be not a pre-religious savage with his other possessions intact, but a being who has not yet begun to reflect or to form abstract conceptions. The problem of the origin of religion will then be that of the appearance of a gifted proto-human who will break through the crust of spontaneity into the reflecting, the thinking, stage of existence.

Let us, then, attempt to sketch a theory of origin that will avail itself of all the legitimate resources of psychology as well as of general anthropology. Placing ourselves in imagination back at the point where the primitive man is yet pre-religious, if we make the necessary deductions from present savage intelligence, we find that point below the level of reflection and abstract ideas in the stage where the conscious functions are all spontaneous and concrete and where, in fact, our primitive savage has not as yet become a man. He is a proto-human; no doubt the most gifted of the animals, but as yet, except to the eye of prophecy, an animal. In this stage he will no doubt have achieved the germs of sociality and of the tribal life, so that the less gifted will be under the tutelage and leadership of the more gifted members of the community. Let us suppose, then, as would sometime be likely to be the case, that in one of these tribes some individual is much more gifted than his fellows, so that like Saul, son of Kish, he stands head and shoulders above them all. He is a genius in fact. Now let us suppose, which is psychologically probable, that his genius takes the form of *attention* and that he achieves a greater *rapport* with objective phenomena than his fellows are capable of. We have here the conditions of such an unusual experience as we have already depicted. Through the *rapport* arising out of the unusual gift of attention, the occurrence of some extraordinary natural phenomenon, like an electrical storm or an eclipse of the sun at noonday, would throw him notably out of his spontaneous balance, first upon the object itself,

and then back upon himself. The objective consciousness would hold in it the germ of *religion,* for it would be his first mental grasp of a transcendent object while the subjective consciousness would give him his first revelation of *self.* Self-consciousness and the objective consciousness of religion would thus originate in the same process, though in this process the objective religious factor would take the initiative.

If, now, we revert to the roots of religion which we have discovered in the human consciousness, we shall find the data that will enable us to construct a history of the probable evolution of the fundamental ideas of religion in the mind of this gifted savage. These fundamental ideas will be those of *God* and of *himself* and his *own soul.* In the first place, we have seen how the root of transcendence, as we have called it (man's sense of the presence of that which greatly surpasses his own power) would lead him to ascribe the extraordinary phenomenon to some transcendent being or power, and we can anticipate how the operation of the self-analogy, the tendency to conceive objective being after the type of himself) would operate reflexively in determining him to define his transcendent object after some vague analogies of the self. We must bear in mind, however, that his knowledge of self is as yet in its germ and that above all he has not arrived at the notion of spirit in the technical sense. His idea of self will be somewhat shadowy, therefore, and in consequence the being whom he characterizes will be one that is transcendent and at the same time somewhat vaguely analogous to himself. This being will represent the deity of the first gifted savage who becomes the bearer of a religious consciousness. Now, there are other roots of religion that will be able, I think, to give us some insight here. These are the social, ethical and the aesthetic. When the gifted savage has achieved the consciousness of religion, he finds that he has also acquired a new organ of general application,—the power of reflection,—and this

organ acts by relating him to the objects of the world that surrounds him. The most interesting of these is the new transcendent being that holds the center of his religion. But scarcely less interesting will be his fellow beings whom he will now recognize not only as beings but as *beings of his own kind.* In short, he will have discovered a new bond of sociality. He will begin to regard his fellow tribesmen as his social others, and this as we have seen in our study of sociology will lead not only to ordinary forms of social reaction, but also to the specially reflective form that is called ethical. He will begin to develop out of these relations the germs of a moral order,—an order of duty and righteousness as well as one of sympathy and love. Normally, however, the most impressive side of morality is that which embodies itself in the ideas of law and righteousness. Our gifted savage will also begin to develop on the cognitive side, and his religious consciousness will not lack an intellectual content. But no one will dispute the proposition, I think, that his dominant reactions will be in the sphere of *conduct* rather than in that of knowledge. And in the field of conduct his dominant reactions will be of the socio-ethical type. Bearing in mind, then, that self-analogy is the principle of characterization in the sphere of religious ideas, it is reasonable for us to expect that the first definite characterization of the deity will be the clothing of him with socio-ethical attributes. What, then, are the principal of these? In the first place, the deity, being transcendent, would naturally be clothed with the highest social relationship known to this gifted savage, whether this be fatherhood, or chiefhood, or perhaps both combined. The deity would be the chief or supreme ruler. And as such he would naturally become the supreme bearer of the ethical attributes. His will becomes the savage's source and standard of obligation. The aesthetic root of religion will enter here as relating the object of religion to the springs of emotion and

also as tending to the development of religious sentiments and ideals.

Now, what is claimed here is that all this in its rudiments (for we are not supposing anything to be completely developed) will belong to the first chapter of religious history. The genius in whom the unique variation we are considering becomes embodied, will no doubt be the instrument of the advance of his tribe to the plane on which this variation will be adopted and become tribal as well as individual. But this, though the first chapter, is not the whole and perhaps not quite exhaustive even of the first chapter. We may be sure that the development which results in the religious variation becoming the possession of the community, will be marked by advance on both the theological and the anthropological sides of religion. While the savage is determining his socio-ethical relations and, by the analogy of these, further characterizing the god of his worship, he will also be determining various things of value about himself and his social fellows. We may characterize this whole anthropological side as the development of the idea of spirits with the accompanying belief in their existence, and the double influence they tend to exert on religious ideas. It is here in connection with this problem, that the anthropological theory attains its maximum value. We might expect that a theory which reduces the whole story of religion to that of *spiritism* would have something valuable to say when the special problem is that of the origin of the idea of spirits and of belief in their existence. In tracing this chapter of religious experience, however, we ought not to forget that the normal *waking* experience of a being that has achieved the germs of reflection may be a factor. We say this in view of the tendency to ascribe the whole result to a sleeping or hypnotic, rather than to a normally waking, consciousness. However, as it is a variation, which marks progress beyond the ordinary level of the normal waking consciousness, that we are seeking to account for, the tendency is probably not wholly misleading. We are

prepared at least to accept in the main what the anthropologists have to tell us about the development of the savage's ideas and beliefs in the field of spirits, as true if not the whole truth. But the immediate root of which this development is a stem is a *reflection on self rather than a reflection on the nature of the gods.* There is an anthropological as well as a theological content in religion.

Now, man's reflection on himself would no doubt at first derive its most important data and its most vital stimuli from dreams in which he finds himself or some friend, or some dead ancestor, envisaged as living apart from his body. By the principle of dissociation he would gradually detach the notion of the phantom from that of the body, and in case of the dead, the existence of the phantom from the existence of the body. His idea of spirits as capable of existing free from the body and of surviving the death of the body, would thus be developed. This result, which would at first be local, confined to friends, relatives, or at least, members of his tribe, would be extended by various means. One of the most important of these would no doubt be the ghostly apparition; that of the phantom spirit dissociated from any particular kind of a body and freely inhabiting space. We must bear in mind that the direct root of this is reflection on self; and this reveals the fact that the savage finds the type of all this spirit-defining in the form of existence revealed in his own self-consciousness. *Spirits are selves freed from the restraints of the body and conceived as living a life of their own.* When once the savage's spiritism has freed itself from bodily trammels his imagination is left without restraint, and he may people the whole universe with spiritual beings. This is where his objective anthropomorphism comes in and leads him to create his worlds of mythology and fancy. These are not products of the immediate application of the self-analogy such as we find in the first stage of religion before the notion of spirit has been formed. They are the direct product of spiritism itself, supplying, as it does, the concept of beings that are

believed to exist in great numbers and that are definitely conceivable. The period in religious development, then, in which the tendency is to refer everything to the agency of personal spirits is thus a *second* stage, and it is not directly a *theological,* but rather an *anthropological* development founded on self-reflection.

But since the theological and the anthropological branches do not unfold independently, we ought to be prepared to find spiritism tending to exert two lines of influence. In the first place it will tend to influence theological conceptions by applying spiritual analogies to the objects of religious worship. Returning, now, to the gifted savage, the development of the belief in spirits will lead to further characterizations of his deity. His deity will not only be a god of righteousness; he will now be a *spirit* and will be conceived as living the emancipated life of a spirit, and not as bound to some particular element as ocean, earth, or sky. No doubt it has been the development of spiritism that has led to the spiritualization of theology. But spiritism itself is of anthropological and not of theological extraction. The *second* line in the development of spiritism is the most characteristic and consists in the employment of spirits to perform religious and quasi-religious functions. We have thus the rise of fetichism, ghost-worship, totemism and other forms of animism, connected with which are some of the most superstitious and degrading features of savage religion. We have said that this development is anthropological rather than theological, so that animism, or as we have preferred to call it, spiritism, while it represents a line of religious development does not perhaps embody the most vital trunk of religion, which is theological and directly concerned with the development of man's ideas and beliefs regarding the deity. We have seen, however, that spiritism has vitally affected man's ideas and beliefs regarding the deity and we have not even yet learned the whole chapter. We have seen how Mr. Spencer is led to take the ground that all the

deities have been derived from ancestral types. This has been refuted, but it contains a truth of importance. The ancestral analogy would no doubt become a favorite one in religion and the tendency would be, as spiritism developed, *to apply the analogy where it had not before been used and to regard the supreme deity as also the divine father of the tribe or the nation.* I apprehend that Mr. Spencer has been misled by an appearance. In some instances the ancestor-analogy may have been seized on by the founder of a first religion; but in most cases it is more probable that the use of the analogy has been the result of an afterthought.

Another influence which spiritism would exert in the religious field would be of a less beneficent kind. It would tend to antagonize the worship of the primary deity and to substitute some form of spirit-worship in its place. Now it is a fact of history that spiritism or animism has been relatively unethical. This has no doubt been due in part to the mode of its origin. If the anthropologists be right about it,—and we doubt not that they are in the main,—then we have presented in the method by which spirits gradually emancipated themselves and became free citizens of space, the method also by which they have been freed from ethical restrictions. It is not so much by virtue of his deity that Zeus, for example, is able to carry on his *amours,* as it is by virtue of his emancipation as a spirit from ethical restrictions which makes it possible for him to assume all sorts of disguises. We find also in other cases of evil passions and propensities that are ascribed to the deities of different nations, that these characterize them rather as spirits emancipated from normal restriction than as deities. Thus Jehovah himself, during part of the period in which the Hebrews were most exposed to the influence of animism, came to be represented frequently not as a God of righteousness, but as a revengeful and unscrupulous tyrant. We here see the influence of animism corrupting the purer theological stream. Against this tendency, however, the

prophets, who represent the purer theological tradition, constantly protested, and it is to them that Judaism owes its survival as a pure rather than as a mixed and degraded form of religion.

In the above sketch we have endeavored to show how, if religion originated as we have supposed that it did, the various religious tendencies which have displayed themselves on the page of history could or would naturally arise under it. We have found reason for denying that animism or spiritism presents us a first chapter in the history of religion, or that its exclusive claims can be maintained; but we have found that it represents the anthropological side of religious history as distinguished from its theological side, and that it has exerted a vital influence on the theological development itself, some of this being essential and beneficent, while much of it, owing to its unethical character, has been pernicious, leading to the corrupting of an otherwise relatively pure stream. The ethical element in early religion, as we claim, has been mainly conserved by the theological rather than the anthropological influence. For we have seen how on the hypothesis of origin which we have presented, the pre-animistic conditions would tend to a more direct development of the socio-ethical analogies in the characterization of the deity. The first pre-animistic deity would also be the legislator of the tribe or nation and would thus most vitally touch the life and consciousness of the people on its distinctively ethical side.

If we were asked to present a sketch of religious history that would accord with the theory here developed, we should not deem it needful to modify anything on which an intelligent reading of history would put the stamp of probability. Starting with what we shall here ask leave to call the *onto-psychological theory* of the origin of religion, we see two lines of tendency originating; one the theological which, finding its deity in a transcendent but largely mysterious object, proceeds to characterize this object

mainly through the use of the socio-ethical analogies, reaching the conception generally of a supreme lawgiver and a being that puts the major stress on moral virtues and ideals of conduct. On the other hand, we have what we have called the anthropological tendency which arises directly out of a reflection on self, and through processes in which dream-visions and ghostly apparitions have played an important part, leads ultimately to the idea of free emancipated spirits and to the belief in the world as peopled with these. The belief in spirits affects theology by leading to a more definite ascription of spiritual character and attributes to the deity, and also, more especially, in leading to the conception of God as father of man and his race. But spiritism, on the other hand, is largely unethical and when unmodified gives rise to a downward tendency in religion, embodying itself in fetichism and various animistic forms, while it tends also to the corruption of the ethical ideals of religion and to the diversion of the religious content and worship of the tribes and nations into animistic channels and to the consequent substitution of animistic deities for those of the purer and older type.

We think that history in all its stages shows traces of the development of this purer and more ethical type of religion, and that the central line of this development will be found by following the course of theological ideas as embodied in the older types of the deities of the various races and civilizations. But this development of what has eventuated in pure ethical monotheism has had running parallel with it and to some extent antagonistic to it, an animistic development which has a distinct root as we have seen, and which in spite of its beneficent features has in its pluralism and in its unethical tendencies proved a force of degeneration, corrupting the streams of the purer tendency and in many instances either perverting it to its own uses or thrusting it into the background. History presents more than one instance of peoples who recognize the real gods of their purer traditions, but whose whole system of

worship as well as the character of the deities to which it is paid, is animistic through and through. The real history of the evolution of religion will be one that recognizes this dialectic movement between the two streams of tendency, as central, and that finds the development to be a kind of alternation between degeneration and regeneration and that finally does not fail to distinguish between the positive and negative poles of the movement.

Furthermore, on the question of the historical relations which exist between polytheism and monotheism, whether monotheism grew out of polytheistic roots by way of generalization, or, on the contrary, polytheism represents a corruption of monotheism, I do not quite see the necessity for taking sides. The controversy overlooks what seems to me to constitute a vital part of the situation, and that is the possibility of having sprung from distinct roots. Historically, I should venture to say that monotheism has had its germ in the theological tendency from the beginning. The ethical tendency, which is vital here, everywhere makes for unification and the concentration of divine attributes in one supreme lawgiver and eternal ruler. A study of the older and more primal deities of the nations will serve to show that the monotheistic tendency has been present from the beginning; though it has frequently been broken into and turned back by opposing forces. On the other hand, we are disposed to regard polytheism as a direct output of spiritism. The way in which the idea of spirits originally arose and developed would tend toward pluralism. Polytheism is simply pluralism in the sphere of ultimate religious ideas. When the tendency arose to deify spirits or to spiritualize the deity, the disposition to multiply gods would be fostered by the very multitude of spirits there were to choose from, while the comparative indifference of spiritism to moral distinctions would fall in with the well-known unethical character of polytheism in general. Once admit that polytheism has its roots in spiritism and it then becomes perfectly conceivable that poly-

theism and monotheism, in germ at least, may have co-existed throughout a large period of their development without being connected by any very close logical relations. It has been the presumption of anthropology that, because polytheism represents a *lower* moral type of religion as well as a *lower* condition of religious thought, logically considered, therefore it must have preceded monotheism historically, and monotheism must have evolved out of it as a higher out of a lower form. We dislike to disturb this reasoning, but it is not convincing. If it be possible to trace the monotheistic and polytheistic tendencies to distinct roots, then the question, Which is the older? will not be so vital as the question, How do, or did, these tendencies originate, and Which represents the truer and higher tendency in religion? Now, we have indicated our disbelief in the theory that either has necessarily been developed from the other. We think we have shown that it is more reasonable to refer them, in the first instance, to distinct roots, and we have indicated what we think these roots are. One who sees his way clear to agreeing with these conclusions will find that they help to make him clear on several other points of importance. He will be able to construct a concept of religious evolution in which the development will proceed largely as a dialectic between these two tendencies. And he will understand why it is that while polytheism on account of its unethical character has been in the main a corrupting force in religion, yet it has had its mission to perform notwithstanding. Polytheism represents pluralism in religion. Now pluralism in theology is pure individualism, and pure individualism in theology is a disintegrating principle which strikes not simply at unity but also at morality. But on the anthropological side, which is that of spiritism out of which polytheism has developed, the same general causes which produced the bitter fruit have also been tributary to the development of the idea of spirit, an idea that underlies a whole side of religion, since out of the belief in spirits grew

the conception of personal immortality and the belief in it which is present in some form in most pagan religions. On this basis the history of religion completes itself in two final steps, (1) the triumph of ethical monotheism over polytheism in theology, (2) the synthesis of an adequate monotheistic theology with an adequate doctrine of personal immortality. Or, if we admit soteriology also, our ideal of religious evolution would culminate in a pure theism in synthesis with an anthropology which would associate the doctrine of personal immortality with a pure theory of retribution.

Returning again to the question of the origin of religion, I am unable to agree with Max Müller in his postulate of a sense of the infinite as a special faculty. It seems to me that in the recognition of what I have called the sense or feeling of transcendence which has its root in our feeling of helplessness in the presence of overwhelming power, we virtually achieve all that Müller contends for, without postulating a special faculty. If, however, I may be allowed to translate his 'faculty of the infinite' into my own 'feeling of transcendence,' then I confess to being very much in sympathy with his doctrine. He has done great service in calling attention to the psychological side of the problem at a time when it was in danger of being forgotten. Moreover, Müller's insistence on the fact that the infinite is involved in the conception of God is confirmation of our own contention that transcendence is essential to the idea of the deity. Not only so, but it constitutes its most characteristic and distinctive element. For this reason I am unable to admit that the anthropologists who find the roots of religion solely in animism have given us anything like an adequate account of the origin of the idea of the transcendence or infiniteness of the deity. It is a characteristic weakness of the animistic theories in general that their logic tends altogether in the direction of purely humanistic deities. They seem to rest on the presumption that religion is a purely man-made affair and that it can rest satisfied with a

purely man-made god. I for one am not prepared to accept either the premise or the conclusion of such reasoning.

As to the theory of origin advocated here, that will have to stand or fall on its own evidence. That religion originated in some great objective experience which at the same time awakened the proto-human into a reflective being, and that subjective reflection and the use of the self-analogy constituted a second step in the history of man's religious experience, are propositions that must in some respects remain hypothetical. There is no direct evidence to prove or disprove, as there is none to prove or disprove the theory of the anthropologists. We have given good and substantial reasons, however, for the acceptance of the theory, and these reasons have been drawn alike from logic and history. A further confirmation of the position of the objective origin of religion will be found, I think, in the fact that without exception, so far as I am able to discover, the primitive deities were objective rather than subjective, embodying, like the gods of the Vedas, some of the great objects or forces of nature which at first were but vaguely, if at all, personified. "The history of the ancient religion of India," says Max Müller, "so far as we have hitherto been able to trace it, is to us a history of the various attempts at naming the infinite that hides itself behind the veil of the finite. We saw how the ancient Aryans of India, the poets of the Veda, first faced the invisible, the unknown, or the infinite in trees, mountains, and rivers; in the dawn and the sun; in the fire, the storm-wind and the thunder; how they ascribed to all of them a self, a substance, a divine support or whatever else we like to call it, and how in doing so they always felt the presence of something they could not see, behind what they could see, of something supernatural behind the natural, of something superfinite or infinite behind or within the finite." I fail to see how else than through the calling forth of man's sense of transcendence by his experiencing objec-

tively some of the great objects and forces of nature, the characteristic idea of religion could be awakened. What the animistic theories fail to do is to give any adequate account of the fact that this feeling of transcendence or infinity is so ingrained in religion.

Before closing this chapter one other point is worthy of mention. In the above representation nothing has been said as to the necessity or function of divine revelation in the sphere of religion. Here we shall have to content ourselves with two remarks. In the first place, we have proceeded on the supposition here that man is by nature a religious being and that he would, revelation or no revelation, feel his way after God, if haply he might find him. No one denies that man without supernatural aid would come into some kind of relation with God. Now, the theory developed above is claimed to be the most reasonable account of the way this would be brought about. In the second place a divine revelation must be communicated through human channels. What is claimed here is that the most rational theory of the origin of religion as a feature of the life of humanity will also be most favorable to, and most easily adapted to, the function of divine revelation if that should be found to be necessary.[1]

[1] The reason for this is obvious. If religion be real and not spurious, then its great object, God, is real. It is agreed on all hands that man's religion arises and develops as a phase of his experience. If then we, from the outset, be part and parcel of the life of humanity, and on the other hand if God, its great object, be real, religion will, from the outset, have its divine root and origin in the dynamic relation of God to the human soul. In the operation of the divine Spirit or Logos in the historical life of humanity, this divine energy will penetrate into human experience whether through ordinary or superordinary channels; whether revelatory in the ordinary or the superordinary sense; and the whole history of religion will have its divine roots. In order to write this history of religion truly it is necessary that the historian should have made this divine-human synthesis, and when he has done so he may write the whole story as an evolution; as a struggle upward. But he must be made to take account of lapses and degenerations as well

as advances. In the next chapter this phase of the story will be emphasized. Here the point of importance is the fact that the most rational and adequate account of religion on the human side will be likely also to prove most favorable to the recognition of its divine and even supernatural elements.

CHAPTER VI.

THE RELIGIOUS SYNTHESIS.

We come at length to the question of method: to the determination of the extent to which religion may be made a subject of scientific investigation. And here our inquiry resolves itself into two questions. (1) How far may religion be dealt with as a natural science falling under the category of natural causation? and (2) Is there a sphere for a science of religion above the level of natural causation? In order to treat these questions intelligently a distinction needs to be drawn between religion as a personal experience and phenomenon of consciousness, and religion as an objective phenomenon of the historic order of the world; and it is clearly in the latter sense, if at all, that religion may be treated as a natural science. Whatever has a history that may be written in terms of public events, objective rituals and institutions, will lay itself broadly open to the scrutiny of science. But here we are attempting to discover the limit, not of science broadly speaking, but of natural science with its rubric of natural causation. We have found that psychology itself may be treated as a natural science whenever it is possible to bring the investigation down to the basis of the psycho-physical parallelism. The generic limit of science is found in the fact that it is an investigation of phenomena and professes no independent insight into their grounds. But natural science has a specific limit. Only those phenomena that are phys-

ical or that are reducible to the basis of the psychological parallelism are open to treatment by natural science methods. Now, that there is a sphere in which religion as a historic phenomenon is open to such treatment, we are prepared to admit. For example, in connection with the question of the origin of religion, natural science could deal with the physical conditions of its rise (including both organic and inorganic), embracing in its scope the physical environment in its broad sense as well as the physiological and biological conditions of man's life. These causes, in so far as they have had a bearing on the problem of origin, would be clearly in the province of natural science. Whatever transcended these would lie in debatable territory, while with respect to the distinctively spiritual phenomena, and especially with regard to the question of the operation of superordinary causes, natural science could have little to say. When, however, the question is one of the development of religion in the world, natural science will have a wider field. Religion as a race-phenomenon is complicated with all the physical and physiological conditions that affect the life of man. The anthropologist who investigates religions in their native habitats finds himself brought more and more under the spell of the physical forces, and just as the physiologist is tempted to say that man is what he eats, so the anthropologist will be more or less oppressed with the conviction that man's religion is a reflex of his physical conditions. This is no doubt extreme, but it is only the exaggeration of an indisputable fact. The development of religion may be treated as a natural science within certain limits, and its aim will be analogous to that of physiological psychology, which proceeds on the statement of the laws of mind in terms of its physiological envelope. We may say that the treatment of religion as a natural science will have as its aim the development of a physiology of religion, or at least an account of religious phenomena, that is developed from physiological data; only, the mind that is now being studied will be operating on the broad so-

cial arena of history and the brain that correlates with it will be made up of the groups of living organisms that constitute the physical basis of that mind. In Herbert Spencer's *Principles of Sociology* we have an overuse, it seems to me, of analogies drawn from biology and physiology; but the legitimacy of the method is admitted here. To say that religion may be treated as a natural science is to say that there is a point of view from which the psycho-physical parallelism is valid and that from this point of view religion may be brought under the sway of natural causation.

Where, then, shall we look for the limits to the natural science view of religion? This question ought not to be very difficult at this point of our discussion. We have seen that the natural science treatment rests on the psycho-physical parallelism; and it may be assumed that it will end at the point where the parallelism can no longer be presumed to exist. Up to this point natural causation would be the only *vera causa* that need be taken into account. Is there a point, then, in the movements of religion where the presumption of the parallelism breaks down and where, therefore, the science of religion ceases to be purely natural? In order to answer this question it will be necessary to look at the phenomena of religion on their social and ethical side rather than in the light of their physical environment. We have seen that religion arises as a phenomenon of the social consciousness of man, and this is true both subjectively and in the objective sense. The phenomena of religion belong by virtue of their substance to sociology and only indirectly and symbolically to physiology. May it not be true that it is in its sociological character that religion transcends the limits of natural science? This question raises expectations that may perhaps be disappointed, for we remember that there are aspects of sociology which fall under the rubrics of natural science. It is only when we are in the field of social reflection that we begin to transcend the limits of natural causation and we are only

certain of having so done when we find consciousness exercising a mode of determination that is clearly neither in form nor in content a mode of natural causation. Now I think it will be clear that we do come upon such a mode in what we call ethical determination, that is, a determination that is reached in the face of the moral dilemma which presents the forces of desire and duty in conflict and the decision of which is in favor of duty and against desire. Here we have a kind of determination that is at the same time not natural causation, and is yet a *vera causa*, for it is the assertion of an agency in the world in which a self determines itself by the pressure of ideals which oblige, not by the pressure of desires which induce. We strike here the great epochal act in the drama of human experience, the act in which a man achieves his own freedom by exercising the power of determining himself against his desires and in favor of an ideal of duty.

Now, we have learned that one of the sources of religion is found in the ethical consciousness and that it is through this that the ethical attributes and prerogatives are supplied to the deity. We have also seen that religion is an objective social phenomenon and that the ethical issues will, therefore, arise and be decided on the arena of the historical consciousness as truly as on that of the individual. The thesis, then, that we maintain here is that in so far as the ethical motive enters into the historical working out of religion we have a force at work that transcends natural causation; and that in so far as this ethical motive is triumphant in bringing about ethical results there is a *vera causa* at work whose effects are not explicable by the principle of natural causation. We have found in another place that when consciousness becomes reflective it begins to exercise a peculiar form of agency, that of determining itself by ideals. This is the form of freedom. But it cannot be made demonstrably certain that it is also the *matter* of freedom, till we arrive at the crucial point of ethical choice in which the ideal triumphs over the body of

its adversary and finds in the slain desire the symbol of its own reality. The point where the ethical motive in the movements of religion must be recognized is one where these movements begin to transcend the limits of a natural science and require to be treated from some point of view that will not be inconsistent with the recognition of forms of determination which cannot be subsumed under the principle of natural causation.

If it be asked how religion is to be treated scientifically at all from any other point of view than that of natural causation, I could only answer, (1) that I do not find myself scandalized by the thought that there may be important respects in which religion altogether refuses to yield to scientific treatment. William James has reminded us very impressively that the science point of view is not only not the sole point of view that is possible, but that, historically, it is a mere upstart compared with older methods of looking at the world. He reminds us that the world got on and became wise in many ways without science. But this is not the most important part of my answer. (2) That we find in ethics itself an example of a science that is in a large part of its scope ideal and normative. Ethics as a normative science rests on the presumption that the form of determination which we have called freedom is a *vera causa*. Otherwise it would be a normative science only in appearance. And what we maintain here is that the science of religion, at a certain point where it ceases to treat of the conditions of religious development on the basis of the psycho-physical parallelism and takes up this problem of the working out of religious movements in the light of the ethical motives and ideals which are active in them, will find it necessary to supplement its principle of natural causation with the principle of *finality* which is the form of determination that prevails in the normative sciences. And here I think we shall begin to reap the fruit of some of the distinctions of the previous chapter. If we distinguish the theistic-ethical movement in religious history from the more an-

thropological movement of animism or spiritism, which is relatively unethical, we shall find that just in proportion as an unethical animism tends to prevail and determine the course of development, it tends also to fall under the dominion of the physical agencies of natural causation; whereas, we find that wherever the theistic-ethical force comes to the front it tends to show its individuality by embodying itself in some prophet or moral reformer whose appeal to conscience and to ethical choice proves itself a *vera causa* of a different type from that of natural causation.

We pass here, without exhausting our theme, to consider the metaphysical aspects of religion. In order to connect the considerations to be developed here with former metaphysical results it is important, however, that we should refresh our memories with some conclusions reached in treating of the metaphysics of sociology and ethics. We found in dealing with the last issues of sociology that we were led to the postulate of an *eternal consciousness* as the only medium in which the issues aroused by the social could be ideally realized. In short, we found that a failure to postulate such a consciousness would be tantamount to leaving our whole social world, in the last analysis, irrational. Coming down to the metaphysical consideration of the ethical it was found that it is only when freedom is referred back for its grounds to the ethical determination of an ethical will and purpose, that it can, in the last analysis, vindicate its character as a *vera causa* against the claims of natural causation. The social and the ethical thus combine in the postulate of a transcendent ground. Now the metaphysical bearings of religion will be to seek in the great fact of *transcendence* which in the religious consciousness first exceeds the character of a postulate and becomes a real possession. I do not mean that the transcendent object is given here in an intuition, but rather as an immediate inference from certain experiences which we have already attempted to describe.

A few words here will be sufficient, I think, to bring out the real force of the metaphysical implication. In a former section of these discussions and as the result of an elaborate analysis we reached the conclusion that the ground of our certitude of other existents besides ourselves is not an intuition but an immediate spontaneous inference from certain features of our perceptions. This we found to be true of all objects whether mental or physical. We could not agree with those who hold that we have an intuitive knowledge of the existence of the minds of others. Now, socially we do not and cannot doubt the existence of other minds. I ought to say, perhaps, that doubt is possible but that it is felt to be absurd. But the basis on which we hold the transcendent object of religion is what we have called an *immediate reflective inference* from certain unique phenomena. We do not assert that our knowledge of God is intuitive. If that were true it would no doubt be as difficult for us to doubt the existence of God as it is now to doubt our own existence or the object of our perceptions. This is possible, but it is felt to be absurd. Our certitude of God's existence, or of the transcendent object of religion, is not a spontaneous inference of the immediate kind, inasmuch as God is not an object of spontaneous belief or affirmation. The certitude of an immediate spontaneous inference is less dubitable than that of an immediate reflective inference. The reflective inference is more dubitable because it involves an additional step beyond spontaneity. But the transcendent object, being the object of an immediate reflective inference and being, as we have maintained, the object of the first inferential step with which reflection begins, is so little dubitable that it stands as the common possession and the most fundamental belief of the religious consciousness in all forms of its manifestation.

Now it is upon this basal datum of the religious consciousness that two doctrines of the metaphysics of religion have been developed; namely, the idea of God or the supreme being, and the doctrine of the *eternal conscious-*

ness as the bearer of an all-comprehending thought and purpose. That it is the germ of the idea of God and that the theistic conception is directly traceable to it admits of little reasonable doubt. This central norm of transcendent existence we have found to be the nucleus of direct ethical and personal characterization and around it theistic conceptions have organized themselves in all times; whereas, in the animistic forms of religion in which this central datum is greatly obscured, if it exists at all to any appreciable degree, the tendency is to lose the idea of God in the multitude of deities and spirits.

The second metaphysical doctrine, that of the *eternal consciousness* as the bearer of an all-comprehending thought and purpose, springs directly, not out of the heart of the datum of transcendence, but rather out of this datum when its character has been developed by means of the personal and ethical analogies. It is not simply the transcendent deity as the bearer of the ethical consciousness, but this transcendence as personalized and moralized and thus brought into relations with the world and especially with man's own conscious life. Inevitably then, through the ascription of thought and purpose to this being, its transcendence will be qualified and it will be conceived as the bearer of, if not identical with, a consciousness that will be commensurate with that sweep of intelligence and purpose which has been ascribed to it. And logic here confirms probable history; for in postulating God at all in any real theistic sense, we by implication postulate an eternal consciousness. For we have seen that religion is not only an affair of consciousness, but of reflective consciousness. The analogy of the self that dominates, therefore, in developing the concept of the deity will be that of the *reflective self* which relates itself to the world through its ideas and purposive aims. This, it must not be forgotten, is involved in the very texture of reflective activity. It would be as normal, then, as it would be inevitable, that, having reached the idea of a deity that is the

analogue of the reflective self, this deity should be conceived as related to man and the world as man is related to his own reflective products,—namely, through previsional idea and purpose. The divine thought would thus form the basis of such attributes as *omniscience,* when viewed mainly from the side of knowledge, and *wisdom* when thought is touched with the ethical quality; while the divine purpose, from the point of view of the power involved in which God would be regarded as a *vera causa,* would give rise to the attribute of *omnipotence.* Ethically conceived, it would ground the attribute of *righteousness* which we have found to be so fundamental in the history of theistic beliefs. It is a short and necessary step of inference from such attributes as omniscience, omnipotence, transcendent righteousness, to the idea of an eternal consciousness as the necessary bearer or medium of such attributes.

What we may call the dialectic of reflection would here no doubt move through such stages as the following: The first movement of reflection would consist in affirming and setting out before the aroused apprehension, a transcendent and, for the most part, uncharacterized, object. But this movement would scarcely be separable from a second impulse which would be that of characterization. The principle of this would be some form of the self-analogy; and the transcendent object would begin, however vaguely, to assume the character of a personal and ethical being. All this may be regarded as involved in the first impulse or *pro-pulse* of the religious consciousness. Now, we have found reasons for thinking that the root of animism, and consequently of polytheism proper, in religion is to be sought in the humanistic development of the idea of spirits and the belief in their separate existence. Animism thus supplies in its conception of spirits an important factor in religion and, in connection with the primary movement described above, is essential to religious development. But separated from this it tends to the polytheistic extreme and gravitates toward superstition. This is generally the secret of those

religious declines of which history is full. And the cure comes in a reform that restores the animistic branch to its transcendent stem. The impulse arises in most instances in the mind of some spiritually-gifted individual who forthwith becomes a prophet and a reformer. He, in most instances, leads an advance in religious conceptions under the form of a return to a former and purer faith. The ideal of the past is, of course, the parent religious stem before it became degenerate and no real return to it is possible except through an advance that will reinstate it on a higher plane. And this is the way that it will be accomplished historically. The prophet or reformer will lead his people on to a conception that tends to cure superstition by overcoming polytheism. This will be effected in the restoration of the divine transcendence in a sense that shall be consistent with a purified form of the second, or, as we may call it, the humanistic movement. The notion of the deity will not be completely stripped of attributes derived from human analogies, but he will be freed from degrading, grossly anthropomorphic and merely human attributes and his worship will be purged from immorality and superstition. Logically, this third movement may be represented as follows: Having humanly characterized an ultra-human being, a contradiction arises in consciousness and leads to a third movement of reflection in which the negative, humanistic movement is *aufgehoben,* and a synthesis is reached in which the notion of the ultra-human being is qualified by a kind of *personalization* which we may represent here as the *infinitation* of the human analogies. In other words, instead of simply cancelling the negative humanistic tendency when it is found to be inconsistent with the notion of a transcendent being, and thus refusing to ascribe any attributes involving human conceptions of intelligence, thought, or purpose, what actually takes place is the *infinitating* of these conceptions themselves so that they become all-comprehending and eternal instead of finite, fragmentary and

limited to a segment of time. And the synthesis in which the higher unity will be reached is one, therefore, in which the deity is represented as the subject or bearer of an eternal consciousness which is commensurate with the exercise of a thought and purpose all-comprehending and all-determining. The logic of reflection thus leads to a metaphysical conclusion that seems to get confirmation from an enlightened reading of religious history.

Another element in the metaphysics of religion arises in connection with the *logos-idea*. We mean by the logos-idea, the notion of some mediatory synthesis in the character of the divine and human. Let us suppose that the synthesis indicated above has been working itself out along its own lines. If we were to suppose it completed it would not have solved the problem contemplated in the logos. The former problem arose, as we saw, out of the relation between the ultra-human deity and the humanistic mode of representing him. But this problem arises out of the relation between the deity that is the bearer of the eternal thoughts and purposes, and the finite life of man in time. The problem is one of *mediation* in order that the finite spirit of man may come into unity of life with the divine. But the problem would arise in a different quarter of the religious heavens from the one we have just considered. It would not be so much a degeneracy of religion, as a kind of indifference to religion, a tendency to neglect the greater deities on account of their abstractness and seeming aloofness from human affairs, that would call forth the efforts toward reform. The movement would be of the type of that which arose among the re-collected Israelites under Ezra and Nehemiah. It was not so much idolatry and superstition these men had to contend with, as irreligion and indifference. They preached a revival, reinstating the reading of the Hebrew scriptures and the religious observances that had been neglected and leading the people to covenant to restore the family observance of religion. No doubt this tendency for the tran-

scendent deity to become shadowy and abstract would supply one of the conditions of degeneracy. But what we maintain here is that it carries at its heart its own special problem. It is the problem of vital religion,—how to bring the divine more vitally into the life of the human. In the very nature of the case the sense of the need of mediation would not arise during the first stage of religious experience. It would only be in the second stage when polytheism had become rampant and when a danger had arisen that the more transcendent deities of the older time would be set aside, or at least relegated to the background, that the sense of such a need could become much felt. And here again it is not likely that it would be generally felt. What would be generally felt would be the growing aloofness of the non-humanistic deities, along with a leaning toward the humanistic deities on account of their greater intimacy with men. The need would be felt by the prophet-reformer who, if his reform embodied a real advance, would somehow meet the requirement of closer intimacy. Now, as a matter of fact, the prophet or reformer himself would become the instrument of this mediation; not that he would in any sense identify himself with the deity, but he would become a conscious and, in some way attested, channel of communication between the divine and the human, and during his lifetime the mediation would be accomplished. But the idea of mediation is only completely achieved in the *logos:* the idea of a synthesis of the human with the divine character. That God should phenomenalize himself by taking on at some point in space and time the form of a human manifestation is an idea not foreign to religious thought, nor lying outside of the possibilities which the religious consciousness would recognize. Now, the *logos* is simply this synthesis ideally completed in a nature that has not ceased to be divine in taking on the life of a human. It is clear that this if achieved at any point in history would be the ideal solution of the problem of mediation.

Historically, this mediating tendency would be likely to embody itself in two materially different forms. Bearing in mind that we have found reason for thinking that the monotheistic and polytheistic movements were largely parallel and conflicting, we shall be prepared to find the need of mediation met in two very different ways. On the side of monotheism it would be met occasionally by the angel or heavenly messenger of the deity, but ordinarily by the earthly prophet who would become a channel of communication between the deity and his people. Wherever monotheism dominated the religious conceptions of the people, or wherever the appeal was to these monotheistic conceptions, the mediation would be likely to take this form. But the need would be felt on the side of polytheism also and would be responded to in the polytheistic way and perhaps in a very unethical spirit. (1) In the practice of the greater deities of assuming various mortal shapes in order to come into those special relations with men necessary to carry out their purposes, (2) in the scales of intermediate beings that would be conceived in order to enable the gods and men to come into more familiar intercourse. This scale of intermediates may be said, of course, to be a product of the later Alexandrian Greek imagination. But the same tendency would manifest itself earlier and more grossly in the multiplication of deities and *quasi*-deities as in fetichism and other forms of animism. What is maintained here is that history presents two sets of mediatorial tendencies instead of one and that the inspiration of these comes from different sources. Moreover, we should expect historically to find that only those movements that were inspired on the monotheistic side would go on to their completion in the idea of a synthetic nature, divine and human; for polytheism is already disguised humanism, and under the stimulus of the mediational motive would tend to throw off the mask and become purely humanistic. The humanizing tendency of polytheism would therefore lead to the

eclipse of the divine and the degradation of religion into pure idolatry and superstition. On the other hand this same tendency, when proceeding on monotheistic presuppositions and guided by the ethical spirit of monotheism, would tend toward the meeting of a real requirement of the religious consciousness,—the mediation of some "days-man" who would stand as a relating bond between God and the human soul. The dialectic of reflection in reaching this result on the monotheistic side may be represented as follows: The first act of religious reflection postulates God as transcendent. But in postulating him as transcendent we virtually put him away off in the heavens and cut ourselves off from living relations with him. This leads as a second step in reflection, to the demand for a human mediator, a man who as prophet or seer shall become the channel of inter-communication between God and man. But this second step gives rise to a dilemma which will rise to consciousness, practically, when the people have been deceived by some false prophet, or when they begin to pay divine honors to the prophet himself. Logically, it will arise when it is seen that the proposed mediation is no solution but leaves the elements still apart and subject to accident. The third and synthetic step of reflection is taken when the dualism between the divine and the human is virtually denied and a unitary conception reached, not on the basis of identity, but on that of synthesis, by virtue of which the divine becomes human not by any disrobing of the vestments of divinity, but by the interpenetration of the divine and the human in one conscious experience.

Partly identical with the problem of mediation, but to a great extent distinct, another problem in the metaphysics of religion would arise in connection with pantheistic tendencies and beliefs. Pantheism may arise as an alternative to either theism or polytheism. If we define theism as the theory of one, personalized deity, and polytheism as the theory of a plurality of humanized

deities, we may then define pantheism in terms of its relation to each. As related to theism, pantheism will be the theory of the one depersonalized deity, while in relation to polytheism it will be that of the all-deity as distinguished from the many. Historically, we should expect to see pantheism develop along both of these lines, giving rise on the one hand to the community of gods on the Greek Olympus, and the pantheon of deities at Rome. Pantheism would arise among the polytheistic peoples, partly from a genuine instinct for unity as among the Greeks, and partly from an aggregation of different national religions under one control as at Rome. But in all cases there would be present the motive of impatience with pluralism and the desire to reach some system of grouping which would represent a possible *modus vivendi* in such a rout of deities. The pantheism which grows out of polytheism is at best a kind of collectivism representing federation rather than identification. The deeper pantheistic tendency is to seek rather on the monotheistic side where, as among the Greeks, reflection early extricated itself from the pluralism of the Greek popular religion and worked out a religious conception of its own, historically related to the older and more monotheistic conceptions, but logically responding to the speculative demand for a unitary theory of the world. The Greek monotheist was one who early broke with polytheism and found his historical starting-point in older religious conceptions. Now, turning to the Orient, which is the native heath of pantheism, we find that the Indian pantheist early broke with the polytheistic tendencies of Vedic religion. To what extent he found a historical point of departure in older and more monotheistic forms of religious ideas, is somewhat debatable. The fact of the early breach with polytheism is not in debate, however. Most of the existing religions of India refer back to a speculative basis in some philosophy which preceded them and which either constitutes their back-

ground, as in Buddhism, or their more positive foundation as in the Brahmanistic creeds.

Moreover, not without suggestion are the different points of departure of Greek and Indian thought in reference to the same problem. The Greek Xenophanes, who may be taken as representative, combats the pluralistic tendencies of the current religion by striking directly at its anthropomorphism. 'Your gods are magnified men. If you were oxen, they would be magnified oxen. The gods have not the bodily parts of men.' This he ridicules unsparingly. Then, to enforce his anti-humanism, he strikes at the pluralism in a way that cuts up the principle of anthropomorphism by the roots. 'God is all eye. He is all thought. His plurality is only apparent. The essence of his nature is his *oneness,* his being *all-present* in any of his manifestations.' Whether Xenophanes was an out and out pantheist or not, and history does not sufficiently inform us on that point, he at least defined the principle of pantheism, the principle that in the later Greek-Oriental thought developed into the concept of a being who transcends all personal attributes and can be only negatively conceived. The negative theology of Pseudo-Dionysius is an early example. Later this same principle embodied itself in that classic of western pantheism, *Spinoza's Ethics,* in which the notion of a depersonalized deity is carried to its logical goal. Turning to the Indian movement we find that it proceeds in a way that is characteristically different. It is the *pluralism* and not the anthropomorphism that the Indian hates. He has no moral indignation against representing the gods as horses, cows, or even as cats and serpents. But he does hate the pluralism which is irrational, and seeks to reach a unitary conception which will transcend the mutability of the current beliefs. The Indian sage who has thought himself clear on this point is represented as carrying on a Socratic investigation with some pupil. His method is to take some concrete example and analyze it down to the abstract existential element which it contains or

presupposes, and which stands for simple being in the various situations. And having led his pupil to see this point of being or existence, the whole burden of his teaching is embodied in the iterated "*That art Thou.*" In short, while western pantheism is achieved by depersonalizing the deity, the same or a corresponding goal is reached in Indian thought by depersonalizing the self. The Indian wisdom says to you, 'Depersonalize thyself and thou art being or existence.' The depersonalized self *is* the deity. The logical result of the two methods is two different types of pantheism; the Hellenic which is not pure since the depersonalization is never completely carried out, and which tends, therefore, constantly to lapse into theism or polytheism; and the Indian which is pure inasmuch as it sets out with the depersonalization of the thinker himself. It is only in the Indian type of pantheism, then, that we find the real, pure alternative to theism. If, then, we be monotheists rather than polytheists, there are, in the last analysis, these two alternatives open to us,—theism, the doctrine of a personalized deity, or Hindu pantheism, the doctrine of a depersonalized self.

This alternative brings to light the dialectic of reflection which is logically involved in the issue between theism and pantheism. Bearing in mind the unethical character of pantheism, in connection with the fact that it is more closely affiliated with monotheism than with polytheism, we might seem here to have developed a kind of inconsistency, since it has been maintained that monotheism is the ethical branch of religion. The difficulty will disappear, however, if we succeed in seizing the real question of the dialectic. This is not primarily whether the deity shall be regarded as personal or not, but rather whether personality itself be a reality or an illusion; and as the oriental thought tends to reduce everything to process, the question is whether the personalizing process be one of realization or illusion. Now, the personalizing process holds in it also the *ethical moment,* and this will be denied

if personality is denied. That in theism the reality of the personalizing process has been affirmed, while in the pantheistic thinking of the Indian it has been doubted and denied, seems to express the fundamental difference between the two modes of reflection. Indian thought regards the process of depersonalization as the way to *real* being and existence. Having determined this, its method is that of self-identification with this real being or existence. Indian thought is scarcely ontological at all in the sense of postulating anything analogous to objective substance. It sets out with the self of the conscious thinker who, by a reflection which takes the form of disrobing this self of all its personal attributes, identifies the sublimated remainder with the real. *That art Thou.* And this is true for every individual thinker. The points of reality are not many, but one. The phenomenal selves may be many, but the real self is one. *That art Thou,* and *Thou* and *Thou.*

Now in theistic reflection this process is reversed. The first movement of reflection has given, let us say, the bare fact of a transcendent existent. But the second is the process of its personalization. This is the stage that meets the Indian's denial. We have, then, an opposition developed between two contradictory modes of thinking, the one affirming what the other denies and denying what the other affirms. The Indian's thought, the process of depersonalization, represents the way of illusion to the theistic thinker, while the theist's thought, the process of personalization, represents the veil of Mâyâ to the Indian. From the standpoint of religious thought there is no way out of this dilemma. We have come here to the dividing of the ways where we simply have our choice between a mode of thinking which will lead on logically to the affirmation of the reality of a personal deity, and one which leads to the denial of the reality of a personal self. It seems clear that when we have come down to a difference of this fundamentally radical character, our dialectic comes to an end and we are left to

choose by which principle of world-interpretation we will abide. This choice will, of course, not be one of arbitrary will, provided it be rationally made. It presents an issue analogous to that which arises between ultimate rationality and irrationality where the thinker finds himself forced to face a dilemma at various epochal points in his mental history. I do not mean that this is precisely an issue between the ultimate rational and irrational; but to each individual who is called to face the alternatives, it will appear to be such an issue; for while we may suppose that the choice will seem to be the rational one to the chooser, it yet remains true that the alternatives themselves stand at least for two irreconcilable and wholly contradictory concepts of rationality.

Among the metaphysical problems in the sphere of religion may also be ranked that of religious knowledge. Is there a knowledge that is distinctively religious, and, if so, how is it to be defined? The problem of religious knowledge divides naturally into two questions, the first pertaining to the *existence* and the second to the *characterization* of the object of religion. On the question of existence we are not about to enter the field of the proofs of God's existence. Our problem here is far other. Among existents what kind of a being is God, and on what basis of certitude does his existence rest. In the first place, God as the object of religion is not an object in any phenomenal sense. Following the analysis of the early chapters, he may be called an *eject*. We did not there attempt to determine what species of eject God is. But it is certain that if he be known at all as an objective existent, it must be indirectly through some symbol, and that the real existent will be ejective. We have already concluded that God is not given immediately in an intuition, nor yet as the object of an immediate spontaneous inference. *He is given as a first immediate inference of reflection.* To change the phrasing, *God is affirmed in a judgment which embodies the first immediate inference of real existence on the part of a reflective being.*

The *existence* of God is affirmed, therefore in an immediate reflective inference founded on the unique phenomena we have considered in another place. The second step will be one of *characterization* and that will consist in the *personalizing process* qualified as we have shown by the principle of transcendence, resulting in the idea of God as a transcendent being and the bearer of an eternal consciousness, but yet as a subject of attributes and a performer of functions which have been conceived after the analogies of our own personal experience. Let us name the principle of this entire characterizing activity, the *self-analogy* and the principle on which the eternal consciousness, omniscience, omnipotence, *et al.*, are ascribed to him; that of *transcendence.* The whole process of characterization by virtue of which God is conceived to be more than an unknown x will thus rest on the two principles of *self-analogy* and *transcendence;* and the fundamental question of knowledge will concern the validity of these principles. Now, as a matter of fact the validity of these principles outside of the field of religion is acknowledged in various ways. As regards transcendence, this is acknowledged wherever real objective existence is affimed; that is, in the case of all ejects. But even the idealist who carries his principles so far as to deny all ejects, or at least that we can affirm them as real, will still recognize the transcendent in some form. If he does not recognize it as we have done in these discussions in the final reference of all processes of the relative and phenomenal to metaphysical grounds, upon which their rationality ultimately depends, he will recognize it, like Mr. Spencer, in the assertion of reality, the nature of which is wholly beyond our power to determine or even to conceive. Transcendence in some form will force itself on every form of theory except that of pure phenomenalism. But pure phenomenalism is itself the denial of transcendence and must make its claim good. If pure phenomenalism be the true theory, why should there be existents that lie be-

yond our ken, and if ejects be given up, why do we any longer distinguish between ourselves and other beings? And if we concede these other beings as pure projections of ourselves upon an empty background, why are we phenomenalists at all? In a world of pure appearance, the appearance becomes the absolutely real and the pure phenomenalist is the absolutist. Why, then, should he need science? Fact is absolute and to go farther would, to use Lotze's phrase, be like 'going behind being to see what it is made of.' We must either admit transcendence or we must abnegate science and become mental quietists.

Just as true is it that outside of religion the validity of the principle of self-analogy is recognized. If we recognize ejects at all we depend on this principle for characterization. If we recognize ejects as Mr. Spencer does and deny the validity of self-analogy, we find ourselves forever affirming bare existence without the ability to go farther. In fact, we find ourselves hopelessly impaled on the bare point of abstract affirmation. The only consistent denial of self-analogy is that of the Indian pantheist, who reduces consciousness down to the point of bare abstract existence. But beyond the last affirmation, —the "That art Thou,"—there is nothing further to be said. The Indian accepts the logic of his situation, which is that of eternal quietism. The logic of pure phenomenalism and that of its absolute denial, Indian pantheism, thus come together and are identical. We have one choice, then, between absolute quietism in which nothing happens and nothing can be affirmed, and an attitude for which something may eventuate and for which science is possible. Let it be understood here that we are not refuting either pure phenomenalism or Indian pantheism. They stand as possible alternatives of thinking. We only point out the fact that they are logically impossible to any one who thinks that anything can be made out of either discussion or investigation. To the pure phenomenalist and the

Indian pantheist, truth is a bare abstraction and we can afford to leave them alone in that conviction.

We may assume the validity of the principles of transcendence and self-analogy outside of religion without further parley. If truth be not a present possession, then research, learning, science, are necessary and the principles must stand. Now when we enter the field of religious ideas we find that the thought which follows the Hellenic rather than the Indian tradition and doctrines in science, has manifested two diametrically opposite tendencies; the one denying the self-analogy and tending toward nescience, the other denying transcendence and tending toward omniscience. Let us designate the two forms of tendency agnosticism and gnosticism. Agnosticism, so far as we are concerned with it here, arises out of the simultaneous affirmation of ejective existence and denial of the validity of self-analogy as a principle of characterization. We thus find Kant and Spencer and, in some of his moods, Huxley, asserting the eject in the form of things in themselves, or ultimate powers, while at the same time denying the only principle by which ejects can be intelligently conceived. The logic of this situation is, of course, that of the Indian, but the agnostic loses his nerve and draws back at the last step. Instead of accepting the logic of the situation and lapsing into quietistic calm, he breaks into a quaver of doubt and is forever tossed back and forth between the horns of affirmation and negation without the ability to get any certain hold on either. I say the characteristic agnostic position represents a loss of nerve more than anything else, since the denial of the self-analogy with which it sets out ought logically to lead to absolute quietism. But the agnostic clings to the straw of a possible alternative and he wishes to save science. *Hinc illae lachrymae.* Gnosticism, on the contrary, is a more robust growth, since it is at least sure of its own mind. The form of gnosticism in which we are here interested is the species that denies transcendence and

professes to include the absolute under definite categories of thought. This has been the dream of modern rationalism from Descartes to Hegel. That the real is the conceivable and that its absoluteness culminates at the point of clearest and most definite conception is the inner essence of this modern gnostic movement. Now, we cannot lay any charge of weakness at the door of modern gnosticism. On the contrary, it is the most robust kind of dogmatism. But there is one last insight which it lacks. It does not see that to deny transcendence is to affirm the truth of pure phenomenalism which it regards as its opposite. Let us see how this is. Pure phenomenalism denies the distinction between reality and appearance and makes the appearance the real. The real mistake that is committed here is not so much a wrong judgment regarding the nature of the real as it is an effort to get on with a one-term reality. The suppression of distinction is the suppression of movement, and this means death. A real that was purely transcendent would not only be inaccessible; it would be dead. On the other hand, a real that is wholly contained and subsumed under defining concepts has, by virtue of that fact, become completely phenomenalized. The truth is, then, a present possession and absolute quietism the logical outcome.

It may be taken, then, as capable of demonstration that neither agnosticism nor gnosticism are logically tenable, but that each moves directly toward a logical goal which it abhors. Now, we have found these principles behaving so much like abstractions when either has been elevated into an absolute that we are prepared to regard them as abstractions when so used and as only having value for reality when employed in a *concrete synthesis*. This seems to be the lesson of our modern thinking in most fields; it has been too abstract and fragmentary,—too much disposed to put asunder what God has joined together. And if we apply this lesson in the sphere of religious ideas it will only be what we have been finding it necessary to do in every other sphere where reflection enters. If, then, we

define the principle of transcendence as (1) a principle of existence by virtue of which the real existent apart from ourselves is affirmed as an eject, (2) in relation to characterization, as the principle of *infinitation* by virtue of which the whole characterization of the deity is transcendentalized, so to speak, and all his attributes represented as commensurate with the eternal consciousness which we find it necessary to ascribe to him, it will be found that we are asserting a principle which, if applied abstractly, that is, without reference to the *self-analogy,* would have no content at all except the mere fact of transcendence itself. This we could develop into certain negative conceptions like the Hamiltonian infinite or absolute, that would represent simply the negation of the positively conceivable and, therefore, of conceivable content. Our category of transcendence would thus remain empty of content with the exception of the bare existent with which it starts. We do not need to repeat the logic of such a situation or to argue any further that its real goal is much more radical than that which the agnostic contemplates.

Again, if we define the principle of self-analogy as that of the personalization of its object, the object being given, it will be clear that this is the principle and the only one by which the given ejective existent can obtain any characterizing content. We could not without it reach the notion of even the transcendent attributes,—that of eternal consciousness, omniscience and omnipotence, for example. Nothing but the pure emptiness of the negative attributes would be possible. But let us suppose an unqualified application of this principle to the object of religion. The result would be pure anthropomorphism, a complete suppression of transcendence and the conception of the deity as possibly a "magnified," but certainly not a "non-natural," man. The unqualified application of the self-analogy would result in pure humanism without a trace of transcendence and thus in the total suppression of religion itself. If, however, we recognize these principles

as parts of a living synthesis that is not to be broken, we shall find that the results will be in every way more rational. Wherever there is a living synthesis of this species, involving the operation of forces that in their abstraction are mutually contradictory, it will be found that the real movement takes the form of a dialectic and the object here is to trace the stages by which this movement is realized. Let us suppose that religion originates, as we have represented it, in the conscious effort of some proto-human genius, who has been awakened to reflection by some stupendous or appalling natural phenomenon, to apprehend and characterize his object. We have in this first experience, in the affirmation of existence, also the germ of transcendence. We have supposed the cause of the religious awakening into reflection to be *necessarily superordinary*; for it is difficult to find in the ordinary the motive for an extraordinary experience or advance. Using the terms of evolution, we have said that his first step in religion would be a unique variation that contained in it the germs of the superordinary. Think of it, and say how else it could originate. Mr. Spencer weakens his theory of origin by *seeking in the ordinary*,—that is, in dreams of living or dead humans,—for a *point of transcendence* that is not there. Once given the point of transcendence, and one can see how it might coalesce with the dream-experience and qualify it for some of the effects Mr. Spencer ascribes to it. The dialectic involved in the origin of the notion of the deity would be, first, this objective shock out of which would result the first movement; the emergence of the transcendent x, for it would be otherwise undetermined. But the principle of the characterization of ejects is *self-analogy* and this would operate, however vaguely and crudely, in the direction of personalizing the object. Out of this effort of personalization would arise, in turn, a reactionary reflection motived by the feeling of transcendence which the object had inspired. Moved by it the primitive man would not be able to carry his anthropomorphism so far as to conceive the

deity as a being altogether like himself. The opposition of tendencies in his mind would, however, lead to an accommodation, to a higher synthesis from which doubtless some of the lowest human elements would be purged out, while those that remained and were ascribed to the deity would be touched, as it were, with the sense of transcendence. They would be magnified and enriched in content so as to be in some way commensurate with the ultra-human cause of the religious phenomena. Thus would arise the first step of that *infinitating* process by which the two dialectical principles would alternately pass through the moments of opposition and coalescence.

We have represented the stages of the dialectical movement in which the two principles come together in mutual qualification. We have only to consider the working out of this dialectical movement *subjectively,* in the reflective consciousness, and *objectively,* on the page of history, in order to be convinced that it embodies the true course of religious knowledge and progress. Subjectively the progress would be marked, in one way, by the greater emphasis that is put on the transcendence of the deity and the consequent widening of the distance between the divine and the human. This would be accompanied by clearer conceptions of the respects in which the notion of the deity negates that of man, and by the tendency in characterization to put the greater stress on such attributes as eternity, omniscience and omnipotence. We have only to compare the conceptions of the Christian child with those of the same child when perchance it has become a Christian philosopher in order to realize the vast development on the side of the divine transcendence that has taken place. But this development of the sense and ideas of transcendence would not be the only aspect of subjective development. The Christian philosopher would have also passed through an evolution on the side of the principle of self-analogy. The child makes a short cut in the use of this principle, carrying bodily over to the deity the per-

sonality of some good man in whom it has absolute confidence; perhaps that of its father or teacher. The child's notion, though pure and elevated from the human point of view, will no doubt be somewhat crudely anthropomorphic, and the Christian philosopher, on looking back along the line of his experience, will find that a gradual modification has taken place,—some of the features of the child-idea will have disappeared wholly, leaving no traces. This will have happened to the whole corporal part which will have dropped out and God will be conceived as a spirit. Again, the philosopher will have learned to distinguish between caprice and rationality in the sphere of conduct and will; as well as between feelings that are largely physiological and the higher and more spiritualized emotions. Intellectually, he will also have learned to distinguish ordinary cognition in space and time from a kind of knowledge that concerns the whole, and it will be the thoughts of the latter that he will ascribe to the divine. There will be no quarter of the personalizing activity that will not have been modified, and the Christian philosopher, while feeling that the being he worships is objectively the same being that received his worship when a child, will recognize that subjectively there has been a great change in his mode of characterizing him. He has not dropped the self-analogy, but this analogy has been purged of its physical and its purely anthropomorphic elements, and the self that is taken as the type of characterization will be the highest ideal of selfhood he is able to conceive. Even when he has thus idealized the self-type, or "copy," as the genetic psychologist would call it, he is conscious of further modifying this type by his sense of transcendence, so that no thought, emotion, purpose or volition of the deity can be said to be altogether like the corresponding mentations of the idealized self. But the whole trend of his subjective development will have been in the direction of a more rational because a more intelligent, conception of the deity. And this, while it will doubtless take away some of the close intimacy and familiarity of the

child's relation to its God, will replace it with a type of personal relation that will be both more intimate and more highly spiritualized. Paul spake as a Christian philosopher, not as a child, when he propounded that closest of all formulas of intimacy, "In Him we live and move and have our being."

Not only subjectively is this true of religious experience, but we shall find it the most effective of all principles in the interpretation of the historical movements of religion. Mr. Spencer conceives the process of development in the sphere of religious ideas to be that of deanthropomorphization. But that he represents this one-sidedly and abstractly is what we maintain here. The law of deanthropomorphization is simply that of pure transcendence on its negative dissolving side. We have seen that, historically, the principles of transcendence and personalization sprang from distinct roots which may be separated in the actual movements of religious development. To speak more specifically, the principle of transcendence may associate itself with one line of religious evolution more definitely than with another, while that of personalization may be more definitely associated with the lines that are least influenced by the principle of transcendence. Historically, I think we shall find this to be what has actually taken place. We have seen that monotheism and polytheism represent two distinct and largely parallel developments, polytheism arising out of distinctively animistic roots, while monotheism springs more directly from the earlier and objective side of religion. We should naturally expect, then, that the principle of transcendence would be more effective along the line of the objective monotheistic development, while the principle of personalization would be likely to dominate the polytheistic movement. At least two abstract movements would then arise which would require to be distinguished from the concrete movements of the dialectic itself. One of these would be an extreme monotheistic movement in the direction of

monotheistic pantheism. This movement would exemplify the abstract principle of transcendence. The other and diametrically opposite would be an unlimited and unbridled pluralistic movement in the direction of pure polytheistic individualism. Monotheistic pantheism and polytheistic individualism thus represent abstract religious movements at diametrically opposite points of the compass.

Now, it is not to these extreme tendencies we are to look for the operation of the real law of religious evolution, but rather to those more measured movements in which the alternation of opposite tendencies may be detected. Thus if we take the history of Judaism from Moses to the end of the old dispensation, it may be said that the Mosaic legislation was the re-establishment on a higher plane, and with more elaborate ceremonials, of the old monotheistic worship of Abraham which for various reasons had fallen into decline. The subsequent history of the Hebrew race was made up of a long alternation of struggles between the pure monotheism of the transcendent Jehovah and the polytheizing tendencies of the animistic religions with which it came into contact. The result of these struggles was a checkered history by which the tribes, after a partial and, in some cases almost total, apostasy, would be recalled to their allegiance by the continued influence of their own misfortunes and the teaching of some prophet who would arise for the emergency. These restorations, however, also represented *advances* and in very special directions, and while the transcendence of the deity asserted itself more strongly against the influence of polytheism, so that the temptation to polytheism gradually ceased to exist, there was a parallel movement in the direction of the purification rather than the suppression of the personalizing tendency itself. This is seen in the gradual but sure moralization of the people, so that the degrading rites and superstitions connected with the worship of the polytheistic gods lost much of their power. That this was a purification rather than a suppression of the personalizing tendency is shown by the fact that

the idea of Jehovah, as expressed by the later prophets, was one that, while preserving the essentials of the older conceptions, qualified them with many of the gentler and more social traits of character. While, therefore, Jehovah still remained the God of righteousness, he also began to manifest in a more pronounced manner the traits of love and peace and gentleness. The development is thus what would be expected from a movement in which the results were being influenced by the opposite principles of a dialectic.

The limit of this chapter has been reached and we can only say in concluding it that wherever the fortunes of religion can be definitely traced, our belief is that Mr. Spencer's law of deanthropomorphization, in all cases where it operates toward the distinct suppression of the personalizing tendency, will be found to be the law of a decadent movement; whereas, in all movements that have been clearly in the direction of religious progress and of more elevated religious conceptions, it will be found that the operation of this law has been qualified by some force of a different kind, working in such a way as to bring about a more purified and elevated form of personalization rather than its suppression. This is what we should expect if the real movement were a dialectic of opposing principles. We conclude, then, that the real law of religious evolution is not that of abstract deanthropomorphization, which tends to the suppression of the personalizing tendency. Nor, on the other hand, is it the law of unqualified personalization tending toward the complete humanization of the deity. These are the laws of abstract tendencies and represent extremes, while the measured movements which represent real progress are determined by the alternating dialectic of the forces of personification and transcendence in interaction.

CHAPTER VII.

PHILOSOPHICAL ASPECTS.

In the preceding chapter we have stated and illustrated what we conceive to be the true law of development in the sphere of religious ideas and conceptions. This law is the expression of a dialectic movement in which the operative forces are the principles of self-analogy and transcendence. In the light of this law we were able to determine that deanthropomorphization is only the negative aspect of a process which on its positive side takes the form of a more elevated and purified use of the principle of personalization. Now this law holds in it the historical evolution because it is primarily a law of religious reflection. The thoughts of men in their effort to intelligently apprehend such a being as God find themselves passing through the stages of a dialectic. For while the necessity of regarding God as a transcendent being arises directly out of the motive of the origin of religion, yet we find it necessary, in order to reach any intelligent concept of his nature, to figure him under the analogies of our own personal selfhood. There thus arises an inevitable struggle, between the personifying tendency and the sense of transcendence, which leads on the one side to the ascription to the divine being of elements of personal character, while on the other we are moved to an incessant removal of the limits we have placed. The result is a movement of approximation in which we are progressively conceiving the value of x which stands for the

divine nature, but never reaching a definition that can be taken as final. While, as the result of this process, we find our conceptions of God becoming more intelligent and rational, we are nevertheless under the necessity of admitting that we have not yet fully apprehended. The principle of religious knowledge we are stating here cannot be called either agnostic or gnostic, inasmuch as it contains neither a justification of ignorance nor of omniscience.

We have given this chapter the title that stands at its head in order to indicate that its main business shall be a further reflection on fundamental ideas of religion in order to reach a statement of them that may be philosophically satisfactory. Returning, then, to the question of the origin of religion, we claim that no theory of origin can be satisfactory that does not take into account the psychological roots and conditions of religion as well as its plainly transcendent character. What we have called the anthropological theory of origin seems to us to have failed at both these fundamental points. It postulates an exclusively subjective origin when it seems clear that its transcendent character demands an objective origin. It largely ignores also the psychological roots of its problem, and makes nothing of the fact that religion in its very nature is an affair of the reflective consciousness. We have, on the contrary, endeavored to connect the origin of religion with its psychological roots in consciousness, and we have not only recognized its nature as a phenomenon of reflection, but have connected it, through its extraordinary character, with the beginnings of reflection. In reality, however, there is nothing surprising in the supposition that the beginnings of reflection are identical with the first apprehension of the religious object; or at least with the experience out of which that first apprehension grows. It would surely require some objective stimulus of unusual force to break the crust of spontaneity and embark the individual on the life of reflection. Moreover, when we consider the large function which religious genius has performed in

religious evolution, it is not unreasonable to assign to it here a function also in its origin. In fact, since the whole theory of origin from any point of view of history is hypothetical, it is more reasonable to suppose that some one member of a tribe took the initiative in its origin, than that it came simultaneously into the possession of the whole tribe. And if so, then it is more reasonable to ascribe the function to the genius than to the ordinary individual. Bearing in mind that the primitive man is a purely hypothetical being whom the anthropologists have constructed from their observations of beings of the same species who have had the benefit and disadvantage of many thousands of years of evolution and devolution, it would seem evident that the only test that could be applied would be that of the adequacy of a hypothesis to explain facts. Now, that the sense of transcendence is a fact in religion is admitted. The difficulty of accounting for this fact on any subjective theory of origin has led us to adopt the objective theory. That religion originated in some transcendent objective experience; that this experience came first to a single gifted individual, the religious genius of his tribe, or to a small group of such; that it marked his own transition from the life of spontaneity to that of reflection; that he became the leader and prophet of his people, conducting them to the religious reflective plane and taking the lead in the movement of personalization by means of which the deity became gradually characterized,—all this fits together as a coherent and rational account. Moreover, this theory of origin fits into what seems to be the most rational explanation of the facts of history. If the anthropological theory were true and religion had originated subjectively and by means merely of dreams and ghost-visions, the fact of transcendence would be largely unexplainable. Again, the lowest forms of spiritism ought to represent the oldest forms of religion. But this seems not to be true. Furthermore, polytheism would be clearly the earliest form of religious belief. But this is so doubtful that Max Müller is able to

make out a good case for henotheism, a form of pluralism that is yet more monotheistic than polytheistic in its spirit. Then, too, the ethical element in religion seems to antedate polytheism and belong to the earliest forms of religion, while the unethical character of polytheism is recognized. If the lowest forms of religion were the most primitive, then the primitive man was morally degraded, a supposition that has no historical support and that contradicts logic. Add to this the fact that if we adopt an animistic or spiritistic theory of origin and associate it with a polytheistic theory of development, we lose all power of distinguishing progressive movements in religion from those of corruption and degeneration. On the theory we have adopted, of the objective origin of religion and the subsequent rise of animism, out of a subjective root, we are led to expect that the religion of primitive man would be very crude, of course, but relatively pure and moral, while it would be free from the spirit of ultra-polytheism, if pluralistic in fact. I mean by this that while each tribe and nation would have its god, and perhaps more than one, yet no individual or tribe would consciously worship a plurality of gods at the same time. The god of each individual would be *one* god and his attitude toward that one god would be more after the type of monotheistic worship than after that of polytheistic worship.

The historical order would be, first, this early period relatively pure and relatively unpolytheistic; secondly, the definite origin of polytheism in the worship of a plurality of spirits, the belief in which has been developed by dreams and ghost-visions; thirdly, the development of the earlier monotheistic beliefs out of the primary henotheism, partly through a process of selection by means of which some one deity becomes supreme, but more fundamentally through a development of religious ideas which leads in turn to a transition of deification from one type of divine being to another. Thus in Vedic and post-Vedic developments we have a transition of deification from Dyaus to

Indra and from Indra, in the period of the Upanishads, to a god like Pragapati, the transition from Dyaus to Indra being in the line of a higher type of personalization, while Pragapati is rather a creation of Indian speculative thought than a genuine product of religion. But the vital point of theory is that the historical evolution of Indian religious thought is from early henotheism, with its unpolytheistic spirit, directly to the later monotheism; or perhaps it would be better characterized as monistic pantheism. After the rise of polytheism from its own animistic root there would exist two opposing tendencies in religion, the one moralistic and tending in the direction of monotheism, the other relatively unethical and tending toward greater pluralism. This being the case, it is clear that the polytheistic tendency, at least that of pure, unchecked polytheism, would be downward and that it would be a corrupting, degenerating force in history, while monotheism, with its ethical spirit, would embody the progressive, elevating principle. We have here a criterion that will at least enable us to discern the operation of the historic forces with intelligence. Then, further, our insight will increase just in proportion as we realize that, taken as abstract forces operating independently toward the production of extreme results, the principle of transcendence will belong on the side of monotheism, while the principle of personalization will cast in its fortunes largely with polytheism.

Just here, though, it is vitally important that we should not permit ourselves to be misled. It is the *abstract* operation of these principles that thus becomes one-sided and partisan, the one leading to the notion of a wholly transcendent deity, the other to that of a completely human god. These abstract, partizan movements must be distinguished from the concrete movements which embody real religious progress and which arise out of a dialectic of the two principles, a process in which each is modified by its opposite, tending on the one hand to the modifying of transcendence by conceiving it along lines of intelligible

analogy, while on the other, the use of the self-analogy is purged and elevated. It is only when we have thus apprehended the dialectical movement that we can either interpret correctly the development of religious reflection in consciousness, or discern the actual trend and scope of the objective evolution of religion in history. For it will be obvious that a monotheistic movement which proceeded under the unqualified sway of the principle of transcendence would represent from the beginning an abstract tendency that would lead to unhealthy extremes rather than normal progress. And just as evident is it that where pluralism were dominated unqualifiedly by the anthropomorphic tendency, extreme polytheism would be the result rather than advance toward higher conceptions.

Assuming, then, that we have here reached a true conception of the origin and development of religion among men, let us study briefly two representative race-movements in religion as a preliminary to some philosophical conclusions. These movements to which we ask attention may be called Hebra-Hellenism and Hinduism. We have already traced the Hebrew branch of the first movement down to the end of the old dispensation and have shown how the older monotheism of the Abrahamic period was revived and developed in the Mosaic economy, and how the worship of Jehovah, after Moses, entered into a struggle with surrounding animistic polytheism and only maintained itself and continued to make healthy progress through the agency of the long line of prophets with which Israel was favored. The old dispensation ended, on the one hand, in a monotheistic belief which had at length overcome the temptations of animism and polytheism; while on the other hand it showed signs of losing its vitality, so that there arose tendencies in the direction of either scepticism or religious formalism. This was the period of the Phariseean and Sadducean sects. What the logical and historical result of such a situation would have been, had no modifying influences entered, it is perhaps not possible to say. But

very probably there would have resulted an eclipse of the Jehovistic faith similar to that which overtook the Vedic religions before the period of the Upanishads. The movement of history was changed and finally revolutionized by two causes partly co-operative, partly in opposition. These two causes were Hellenism and Christianity. Hellenism entered through two doors, both of which were opened in the city of Alexandria. The first brought the treasures of Greek and Hebrew culture into contact in the thought of Philo Judaeus who developed a system of conceptions to which the name Hellenic-Judaism might well be applied. It was, in its form, the application of the ideas and methods of Greek philosophy to the conceptions of the Hebrew religion. Now, the fundamental conceptions of Hebrew religion were that of Jehovah himself, righteousness, sin, mediation and expiation. Hellenic-Judaism is a system of reflection in which, employing Greek methods and ideas, an attempt is made to rationalize the conceptions of Judaism and reduce them to the coherence of a philosophical system. The movement was not permitted, however, to work out its logical results, for at this critical juncture, when the fate of traditional Judaism was trembling in the balance, the revolutionary force of the new Christianity entered in and changed everything. Christianity again vitalized religion and it became a living force among men, and this not only affected its influence on the lives of men, but vitalized the sphere of religious ideas. The new religion proved itself able to meet the Hellenic-Judaism of the time and to stem its rationalism not by opposing and casting it out but by assimilating its most vital ideas and filling them with its own spiritual content.

Now the second door through which Hellenism found entrance was that of Neo-Platonism which was old Platonism tinctured to some extent with the pantheistic and mystical doctrines of Hindu thought, but not losing their characteristic Greek spirit. Neo-Platonism did not affect Hebraism directly, but exerted its direct influence on Chris-

tianity with which it ran parallel during the first five centuries of the Christian era. The relation was partly one of mutual exclusion and opposition; partly of unhealthy adaptation giving rise to the great heretical movements of the time; but partly, also, normal, giving rise to the healthy growth of Christian doctrine. These centuries marked the creative period of Christian theology and philosophy, during which the fundamentals of its theology, Christology, anthropology and soteriology, were developed. That Hellenism exercised a potent influence on this development not only by way of method and stimulus, but also by way of contributing conceptions that were germane to the genius of the new religion, is past dispute when we consider its relation both to the beginning and the development of Christian doctrine. We have then in Christianity a wholly unique religion, racially considered. One founded on a Hebra-Hellenistic or, more broadly speaking, on an Aryo-Semitic basis, incorporating in its foundations the ethical and monotheistic religious sense of the Hebrew-Semite, with the clear rational intelligence of the Greek-Aryan.

Turning now to the analysis of Hinduism, we have already indicated the general character of the early movements of the Indian religions. The Vedic religion was never properly polytheistic in its form or spirit. While it could scarcely be called monotheistic, since it recognized a plurality of gods, yet its tendency from the beginning was away from polytheism and in the direction of the concentration of the principal interest and worship in one deity. We have seen also how the Vedas mark the development of Hindu ideas in the passage from Dyaus, to Indra and finally to such a being as Pragapati who was a deification of the wisdom of the later Indian sage. But it is in the stage of Pragapati that we reach the end practically of the old Vedic religion, just as in Hellenic-Judaism we might under different circumstances have had the death-knell of the worship of Jehovah. This was the time of the Upanishads and the period of what Max Müller calls the collapse

of the gods. Disbelief had swallowed up all the concrete deities of the old religion, even Pragapati himself, and a period of virtual atheism ensued as might have ensued in the west had not the revolutionary young religion, Christianity, appeared on the world's stage when it did. What followed on this eastern lapse into atheism? There *followed a movement that is in many vital respects the eastern analogue of Neo-Platonism in the west.* A peculiar movement of reflection out of which emerged (1) *Brahm* and (2) the *Buddha.* The collapse of the gods, and with it the collapse of the objective world, threw the Hindu back upon himself in a peculiar kind of reflection out of which arose the differentiation of the real unphenomenal self which is eternal and unmoved, from the phenomenal self that weeps and laments and is subject to wretchedness and change; the denial of this phenomenal self and all its works, and lastly, the identification of this real self with that which objectively exists. The only real is thus an objective and personal self and "*That art Thou.*" We shall see that there was a later reflection that was different. But this is the reflection that underlies Brahmanism, for Brahm is just this objective *self,* and "*That art Thou.*" Brahmanism thus arises as did the *one* of Neo-Platonism, as the basis of a purely philosophical religion. It could not become the religion of any but the highly intelligent few, and these became organized into a caste and even a Brahman could master it only when he had grown old in reflection. The young man, the child and the woman were left standing in the outer court. As for the masses of the people, even as for the educated and governing classes, so far as they were outside the Brahman caste, this religion was not for them. The consequence was a series of compromises with lower forms of religion, and as compromise always means degeneration, these forms which constituted the religion of the masses were not the restored worship of the Vedic gods in their purity, but rather forms of idolatry and superstition. The wonder has been how such exalted

creeds as Brahmanism and Buddhism should be compatible with the universal practice of such low forms of idolatry and superstition as are found among the masses, and especially the lower castes of Hindus. The reasons may be given in the following order: (1) a speculative religion that is above the comprehension of all but the favored few; (2) caste; (3) compromise.

It was a somewhat different reflection that led to Buddhism. We have seen how the Brahman distinguishes between the phenomenal and the real self. If we suppose the next step to be the denial of the objective existence of the ontological self, we shall have anticipated the course of Buddhistic reflection. The Buddhist is a man who denies the existence of the Brahm and hence is theoretically an atheist. But he has not denied the existence of a real as distinguished from the phenomenal self which is a personal being, that weeps and laments, suffers and changes. Only, the real self is subjective and is nothing apart from the ideal of man himself. The Buddha is not God but one who succeeds in embodying the ideal self in a life. And Buddhism is the cult of those who take this self, which is the subjective analogue of Brahm, as that which they are to become. Buddhism is simply the prescribed method by which this goal is to be attained. But Buddhism meets the same kind of difficulties Brahmanism met with in carrying out its programme. It is too abstract and too exalted for the masses and here compromise becomes necessary. Buddhism, while nominally widely spread, has never succeeded in conquering the masses but must reach them by compromising with their superstitions. Like Brahmanism it presents the phenomenon of a religion, resting on the most exalted philosophical conceptions, which is nevertheless powerless to affect the lives of the people and must hand them over bodily to the dominion of idolatry and superstition. In Buddhism, caste is a weaker force than in the religion of Brahm. Again, its religious ideal, which is the realization of an ideal selfhood, is more intelligible than

that of Brahmanism. The first cause of its weakness is its speculative atheism. If we identify God with x, even mystery has power over the imagination. But if we deny God altogether and reduce x to zero, then the entire religious motive that has its spring in God lapses,—Buddhism weakens itself by its speculative atheism. The second cause is the compromise it is forced to make with superstition. Partly because it is rendered powerless, through its atheism, to influence the masses, and partly because its phenomenalism renders it powerless, or relatively so, against the assaults of polytheism, we find that in Buddhistic countries polytheism runs mad and superstition holds the masses under the spell of the worst forms of idolatry.

This analysis will enable us, I think, to see what the deeper current of religious development among the Hindus has been and it will also give us an insight into the real religious conditions of the present. From what possible quarters could a movement for the internal regeneration of the Indian religion proceed? In the first place, an attempt might be made to restore the religion of the Vedas. But the barrier that would be met here would be the fact that the old religion never reached a pure monotheistic basis. The first monotheism of the Hindu thought is almost purely speculative. The old Vedic religion would be impracticable. In the second place, a movement might be initiated in the direction of a reformed Brahmanism. This would have the virtue of overcoming atheism. But how is Brahmanism to overcome the obstacle of caste? And if caste should be conceded as a necessary evil, how is it to bring its speculative ideal in its aristocratic setting into any sort of vital relations with the lives of the people? Again, a movement might be started looking toward a reform of Buddhism. But how can Buddhism be reformed unless first its atheism be cured? This is the fontal source of its characteristic weakness. Until it be cured of its atheism it remains a system of pure humanism and will

manifest all the characteristic weaknesses of any religion that has eliminated from it the notion of transcendence. It will ever fall an easy prey to animism and all forms of polytheistic superstition. If, in the last place, it be proposed to institute an eclectic religion composed of elements selected from various oriental and even occidental creeds, it ought to be borne in mind that history has put the stamp of failure on religious eclecticism. Eclecticism will never have the virility necessary to achieve the herculean task it has before it in India. It looks as though no cause could be adequate to produce the result except the rise of a vigorous young religion that would represent a decided advance on all the older forms and that would do for the India of to-day what Christianity did for the Europe of its younger years.

The review that we have just completed will fairly bear out, as I think, one philosophical conclusion in regard to the religious history of the east; namely, that no event in the religious history of India corresponds with the advent of Christianity in the western world. Christianity came, as we saw, at a most critical juncture, in time to save the Jehovistic religion from collapse. It came when the stream of Hellenic thought began for the first time to vitally influence Hebrew beliefs. And it came at a juncture where it became both the inheritor and the purifier of the consequent rationalistic movement that resulted from the coalescence. Moreover, it came in time to forestall the decadence and atheism into which Europe would almost inevitably have fallen. Christianity saved the Jehovistic worship and it saved Europe from atheism. Now nothing analogous to this has happened in the orient. The later Vedic hymns betray a kind of consternation in view of the scepticism with which the Vedic gods are beginning to be regarded. In the Upanishads the result has been accepted as inevitable, and the effort is being made to save religion, in spite of the death of the gods, by placing it on a speculative basis. Out of this develops the conception of Brahm and the cult

founded upon it. But Brahmanism proved to be no evangel like Christianity. The Vedic gods were dead and Brahmanism succeeded only in putting a metaphysical deity in their places and one that was too exclusive and too far removed to touch vitally the life or convictions of the people. The only oriental religion that claims comparison with Christianity, historically or in view of its content, is Buddhism. Now it is true that the central figures of Buddhism and Christianity have many things in common. In fact, in their ethical and sympathetic relations with life, in their personal abnegation, and in their exalted ideals, they have very much in common. We have to look at the differences in order to see how very unlike the two evangels are. In the first place, we find that, historically, the founder of Christianity fell heir to a monotheistic religion that was still alive, though modified by Greek rationalistic influences, while Gotama had back of him atheism and a vision of dead gods,—I do not say Brahmanism, for he had rejected Brahm. His atheism included Brahm as well as the older gods. Again, the founder of Christianity kept himself in line with the antecedent Jewish monotheism by transforming the conception of the living and transcendent Jehovah into that of the living Father in Heaven. He is the inheritor, therefore, of the whole ethical and spiritual force of the Jehovistic tradition. Buddha has broken with the religious traditions of his people and has no transcendent element to put in their place. Where there was before the Vedic gods, or Brahm, and all that these might imply, there is now only x. Again, the founder of Christianity, conscious of his own close relation of sonship to the Heavenly Father, seeks to develop the same sense of sonship in his disciples. They are children and heirs of God, being joint heirs with himself. This, I think, is one of the most dynamic of the concepts of Christianity. For a sharer in the divine life has all the resources of the divine life at his disposal and will have as much strength, as much hope, as much fortitude and peace, as God and himself together. Buddha

has the same excellent personal life to commend his doctrine, but the ideal is that of self shorn of all divine associations. We may write self large; we may represent it in its ideal charm and attractiveness; it will never acquire a dynamic equal to that of a divine life whose resources are open to the human. Lastly, the founder of Christianity presents his disciples with an ideal of life that includes the future,—the other side as well as the hidden side of death,—in its perspective. Death is the great spectre that stands at the door of every man's consciousness and minimizes the value of his existence by confining it to the time-span of the present mortal life. But death loses its power in presence of a vision of life that compasses both sides of the grave. Here is another tremendous contributor to the dynamic of Christianity. Buddhism, with the most exalted ideal, puts the emphasis mainly on the present. Its vision grows dim and its faith halting when it contemplates the other side of death. The eclipse of immortality in human life is due directly to the eclipse of the transcendent objective element of religion in atheism. It would seem, then, that neither historically nor intrinsically can Buddhism be regarded as competent to do for the people of India what Christianity was able to accomplish for the peoples of the west. In order to come into a position where it would have the same power, something must happen to it to cure its atheism and its blindness to immortality.

Let us pass in review, then, some of the elements which seem to be both philosophically and historically necessary to religion. In the first place, there is that great central conception of *God* which, philosophically, holds the primacy and, historically, has been central in the religious developments. We have seen that the historical movements of religion can be regarded as progressive only when the idea of God is preserved in its transcendence as well as in its relationship with humanity. In Jehovah, particularly, when we conceive Jehovahism as entering into the life of

Christianity, we have the one instance in history in which the synthetic conception of the deity as transcendent and yet as personally related to men, has had the opportunity to work itself out with anything like completeness. Now, philosophically, the thought of the present tends to identify the idea of God with that of a transcendent self. If we conceive Jehovah as having become the God of Christianity and, therefore, as being the Father in Heaven as well as the more speculative One of the later theology, then the God of Christianity is conceivable as a transcendent self. We have seen that Buddhism has no corresponding conception. But in Brahm we have a deity who is not only conceived as a transcendent self, but as the only real self, with which our own self, in so far as it is real, is identical. Between Brahm and the Christian conception of the deity there is this essential difference: one affirms, the other denies, the identity of the human self with the divine. Let us put the Christian concept of relation in its highest form in the words of the apostle, *In Him we live and move and have our being.* Here is the closest possible relation short of identity, but a denial of identity. The apostle could not say, "*That art Thou.*" In Brahmanism, with its profound identification of the soul with God, and in the Christian conception of an including selfhood that at the same time recognizes our difference, we doubtless find the two modes of conceiving the divine being which may be regarded as thoroughly philosophical and between which the suffrages of speculative minds will always be distributed.

Then, again, there is the idea of the human soul, which may be taken as fundamental in religion. The philosophical conception of the soul is no doubt one in which it is identified with the self, so that many a one who would shrink from admitting that he had a soul would have no scruples about laying claim to a self. Now, without going into any vexed questions here, the distinction is made by everyone between his present, phenomenal self which he is

at any present moment, and the ideal self which every one would like to be, or feels he ought to be. It is this ideal self which one feels one ought to be that is the self of religion and that we therefore dignify with the name of soul. Our soul is the self we ought to be and which we are in danger of losing when we turn away from God or commit sin. It is evident that this soul which a man may lose is the soul that relates him to religion and which religion is to be the means of saving. Let us compare this term in Christianity, then, with the corresponding term in Brahmanism and Buddhism. In Christianity the soul is so real that it is the arena on which are worked out all the issues of redemption and salvation. A man's soul is his real self; and so it cannot die. It is the self that he ought to be; and so he may lose it. But the loss and gain of it are both eternal and not measurable by time. Hence the momentous need of salvation, and its method, being *reconciled* with God and entering into and being included in the divine life. If my soul be hid in the divine life then it is saved. In Brahmanism, the soul is also identical with the self that the Brahman aspires to,—feels, in short, that he ought to be. The whole situation is, however, for him a much more speculative and contemplative one. He has not the same sense of sin as the Christian and there is not the same practical urgency. If he is to reach the peace which is his ideal, he must, in fact, *think* himself into it, and he can do this only by thinking himself into identity with Brahm, who is the peace itself. The method of his salvation is speculative, therefore, and it seeks as its goal complete identity with Brahm. There is no other real self or soul than Brahm and my salvation is achieved when I can say "*That am I.*" In the Brahman salvation the soul becomes God and has no other existence except the divine. In Buddhism also the soul is central. Only, here it stands alone in the universe without any divine companion. The Buddhist's soul is the real self,—the self of the Buddha if you please, which stands as his ideal and

which he aspires to be. The way of salvation is the way of self-help, through self-denial and asceticism, and the goal is the realization of the life of a Buddha. Now the Buddhistic ideal is less dynamic than the Christian. The ideal is less ethical and more speculative, and reflection and quietism have a larger function to play in its realization. We have the soul recognized as central, therefore, in all three religions: its aim, salvation; realized in Christianity by inclusion (hiding) in the divine; in Brahmanism by self-identification with the divine, and in Buddhism by self-realization of the Buddhistic ideal. Comparing the three methods by which in the three religions the soul seeks to save itself, we find that Christianity is the only one in which the soul avails itself explicitly of the divine help; in both Brahmanism and Buddhism the soul finds its way to its goal more by its own unaided efforts.

Another idea that is fundamental in religion is that of *mediation* and the notion of some mediator. This idea cannot be said to be universal in all religions. It is perhaps confined largely to religions of the monotheistic type, or at least to those of monotheistic tendency. No doubt the idea of mediation would first arise out of the sense of guilt or the sense of fear, perhaps out of both combined, and it would take the form of some days-man—a friend to both parties, standing between the offender and the angry deity. The object of the mediation would of course be to bring about reconciliation and remove the apprehension of punishment; or where the sense of guilt entered in, to attain forgiveness. We are not concerned here with the lower forms of mediation, but rather with the idea of mediation as it is exemplified in the higher religions. While it is true that fear and sense of guilt will be what gives man the first consciousness of the need of mediation, it is not true that the idea has no other religious basis. The idea of mediation is one of which the historical and philosophical roots are very likely distinct. Historically, either the feeling of guilt and the consequent

fear of punishment, or the feeling of God's great distance from the human soul, would be likely causes of the need which would be met regularly by a mediating priesthood and the institution of propitiatory sacrifices. Propitiation, however, represents only one and that the lowest side of mediation. Propitiation itself may spring from higher or lower motives and may be either degraded and superstitious or relatively pure and intelligent. At its bottom, however, whatever form it may take, there will be the sense of having got on the debit side of the divine ledger, and the feeling that something is due from us by way of cancelling the claims and turning aside the penalty that might otherwise fall upon us. On the other hand, the sense of distance from God that would arise from a tendency to over-emphasize the transcendent attributes of the divine character would not of itself call for any propitiatory rites. It would tend to produce religious indifference or else it would stimulate a desire to come into closer and more personal relations with God. It is here, I think, that we begin to descry the philosophical root of mediation. Aroused by the sense of the divine distance men would begin to aspire after a closer walk with God. Or, let us say, that in some community where the ethical worship of a transcendent divinity like Jehovah has prevailed, the people on account of an over-emphasis of transcendent attributes begin to lose the sense of that intimate presence of the divine in their lives which is necessary to the maintenance of vital religion. The effect on the masses would very likely be religious indifference and preparedness for the inroads of some form of superstition; whereas, on some gifted soul or souls it would have a different effect and would rouse them up to meet and stem the religious decline by preaching a revival. These men, if they be true prophets, would not aim simply to reinstate the old; they would have diagnosed the spiritual situation correctly and would have arrived at the conviction that what is needed is a gospel in which greater emphasis shall be placed on the personal side of

the divine character and relations. In short, these men would mediate a conception of the divine character and relation that would have the effect of bringing God and man into closer union. The philosophical root of mediation is, therefore, this aspiration for closer unity between the human and the divine. Now it is possible for the historic motive arising from the sense of sin, let us say, and the philosophical motive to coalesce and move in the same direction. Historically, this has doubtless taken place, and in the higher religions, especially, it would be impossible to ignore the philosophical motive as a force in the production of historic results.

This will be apparent if we state the problem of mediation from a somewhat different point of view,—one that will connect it with the dialectic between the principles of transcendence and personalization. Mediation from this point of view is effected by personalization. Wherever we find the effort to personalize the deity, there we shall find also the motive of mediation at work. The distance between God and man must be lessened, unity must be effected, and in order to achieve this, not only must man elevate his thoughts of God, but God must come down to man's thoughts in forms of closer personality.

Only when the elevating of thought thus coincides with the approximating of nearer personalization on the part of the deity will true mediation be effected. If we assumed fixity on the part of our idea of God, or incapacity on the part of man for the elevation of his conceptions, then real mediation would be impossible. Where these meet it will be realized. We can thus understand how the prophetic function in general must be one of mediation,—also the conditions of its failure to produce lasting results. It also enables us to determine what the ideal mediation will be. Conceived in thought, it will be the process by which the human soul becomes one with its divine ideal and thus enters into the divine life without losing its own personality. Represented in terms of religious experience, it will

be that emotional process by which the soul of man becomes one with God in the unity of love. Realized on the page of history as a drama of world-experience, it will be the embodiment in phenomenal form of a divine-human consciousness which works out the unification in terms of a life, —a life that is to stand henceforth as the concrete embodiment of the highest spiritual aspiration.

Comparing the treatment of mediation by the three religions we have already been considering, Brahmanism, Buddhism and Christianity, it will be found that in Brahmanism there is little place for mediation. Brahm stands there impersonal, immovable, and the soul of man must approach him by divesting itself of its personality. When it has completed this process of disrobement it has already become Brahm. This will be the result whether named from the standpoint of thought or emotion. The absolute fixity and impassiveness of Brahm precludes mediation. In Buddhism, on the contrary, mediation is provided for and is in a sense central. The Buddha himself is the mediator, and what he mediates is the process by which the Buddhist realizes his Buddhistic ideal. There is much here that is analogous to Christianity. The Buddha lives the ideal life which becomes the model for religious living. The Buddha through his life becomes formed in the life of the disciple as the norm of what he is himself to become. There is this drama of real mediation in Buddhism which constitutes an element of vital power over the minds of men. That the mediation is not ideally complete is due to another feature of this religion, namely, its atheism. The atheism tends not only toward general impotency, but it takes away the objective character of Buddhism and reduces it to a system of pure phenomenalism. Buddha stands as the objective ideal of the disciple, and thus mediates his own realization in the disciple's life. But there being no transcendent deity in the background, the difficulty of Buddhism rests at the opposite pole from that of Brahmanism. The divine element of stable balance is

lacking and the one-sided humanism of the system creates a tendency to gravitate in the direction of anthropomorphism and the lower forms of polytheism.

Historically, as well as logically, we are led to expect that the ideal requirements of mediation, if fulfilled in any religion, will be fulfilled in a religion of the type of Christianity. We have seen that Christianity fell heir to both Judaism and Hellenism; the former supplying it a historical example of mediation on the plane of history, in the prophetic mediations between Jehovah and his people, while the latter, in its idea of the *logos*, and especially in the form which this took in the doctrine of *logoi* or intermediate beings, in the system of Philo, gave an illustration of the working out of the notion of mediation in the sphere of reflection. Mediation was in the air, therefore, when the new religion arose, and Christianity was in a position of vantage for working out an ideal solution of its problem. We are not dealing here with the question of what Jesus, the founder of Christianity, professed to be, or in fact with any phase of the question of the truth or validity of the claims of Christianity. The only question we are here concerned to answer is how Christianity met the requirements for ideal mediation between God and man. I think the answer must be that these ideal requirements were in all substantial respects met and satisfied. We have seen what ideal mediation involves in the subjective spheres of religious ideas and religious experience. The objective counterpart of this in history is the appearance of a God-man in phenomenal form whose life shall be a practical solution of the mediational problem for men as well as a model of the life that they are themselves to live and to strive after. The Christ of Christianity is the embodiment of this ideal, and his life stands as the historical working out of the drama of an ideal mediation, a historical incorporation of the norm of a new life in the consciousness of man.

The subjects of *sin* and *salvation* are closely related

to that of mediation, for while we have seen that mediation has other motives than the sense of sin and guilt, yet these also enter in and modify the whole process so that it becomes soteriological as well as mediational. Every religion will have its practical doctrine of salvation, its method of securing its life-ideal, whatever this may be, through the practice of its religion and especially by means of expiation and sacrifice. We are dealing here especially with the higher and more ethical forms of religion in which the sense of sin has developed and soteriology has taken on a philosophical aspect. Now it is important that we should distinguish between the sense of guilt and the sense of sin. The sense of guilt is the feeling of incurred penalty and may exist where our sense of sin is not at all lively. It may, in fact, be largely made up of anticipations of punishment. The remainder of the feeling will be one of legal putability. A man may be *adjudged* guilty; he can only be *made* sinful. If we arrange the soteriological motives in the scale of fear, guilt and sin, it will be found that in the highest religions the dominating soteriological motive will be that of sin. What, then, are we to understand by sin? The famous Westminster standards define sin as "any want of conformity to, or transgression of, the law of God." That definition is sufficiently broad, since it says in substance that sin may be either a state of rest or a state of motion,—either negative or positive as failure to conform, or active transgression. It also brings out another important quality of sin; namely, its ethical character; it is a breach of *law*. And lastly, the breach of law only becomes sin when that law is *divine*. Let us see if we can get a description of sin from these elements. Sin objectively is the condition of non-conformity or active hostility to a law that combines moral and religious sanctions. Subjectively and psychologically, it arises as the sense or feeling of this non-conformity or active opposition of will. Let us translate the law that combines both ethical and religious sanctions into terms of an ideal, the divine ideal

that stands as the goal of mediation. The content of this ideal will be enjoined in the form of a law that combines both ethical and religious sanctions, and sin will arise objectively as either failure to conform, or opposition. Subjectively, it will be a man's consciousness of this failure or opposition. Clearly, then, sin may be constitutional as well as functional. Or, to use the terms of science, sin may be congenital as well as acquired by the individual. We shall not get to the bottom of sin till we treat it as congenitally inheritable as well as functionally acquirable. We arrive at the sense of congenital as well as actual sin when the religious consciousness brings our lives and our present status into comparison with the requirements of that ideal which bears the ethical and religious sanctions.

When connected with sin in the profound sense we have indicated, soteriology takes on its most philosophical form. It can be no longer simply a device for escaping punishment, or an instrument for the removal of the guilt of actual transgression. It must strike deeper and lay hold of the ideal. The standard of the sinless is that perfect law of liberty; that divine ideal which we must realize in order to attain the goal of the religious life, unity with God. In view of this standard, we are both congenitally and in our present character, non-conformers and transgressors. We are sinners in the profoundest sense, and we need a salvation that can lay hold on our profoundest nature and work out its redemption. A soteriology that is philosophically satisfactory is one, moreover, that identifies itself with the mediational function in religion. Through the motive supplied by sin, the process of mediation becomes soteriological and embodies itself in the way of redemption and salvation.

The last topic we shall consider here is *immortality*. That the early religions should be silent as to immortality is no matter for wonder. The awakened man (and we have contended that religion must awaken him) must first

meet death and reflect on it before thoughts of a life beyond death can arise. We take death for granted and it scarcely occurs to us that any other attitude is possible. We have only to study the animals, however, in order to become acquainted with a species of life that has no knowledge of death. The animal comes upon the phenomenon, of course, but it is debatable whether even the most gifted animals regard it with anything more than dumb amazement. The primitive man would have to familiarize himself with death and he would have to accumulate sufficient experience to enable him to roughly conclude that all men die, before the certainty of death could be brought home to his own consciousness with any degree of force. Having in some sense reflected death, it would be possible for him to trouble himself about the problem of life beyond death. The anthropologists tell us that polytheistic religions like the Greek were earlier developers of the belief in the life beyond death than monotheistic religions like that of the Hebrews. As evidence, they point to the alleged fact that the Hebrew scriptures until a late period in Judaism are silent on the subject of a future existence, and find all their motives for religious living in the present life. It is pointed out at the same time that the Greeks had a fairly well developed doctrine of immortality. What force there may be in this claim I am not prepared to determine. But that polytheism might in the course of its development, through natural causes, come into possession of a doctrine of survival earlier than monotheism, is historically plausible if we consider the fact that polytheism had its origin in animistic roots. The historical doctrine here advocated is that the primal root of religion is monotheistic, in germ, while polytheism grows out of animism which represents a second stage and a distinct root. Now the animistic distinction between body and spirit would foster a belief in the spirit's ability to live an independent existence. We find in animism, then, a motive for the early development of the belief in survival, and polytheism growing out

of animistic soil becomes the inheritor of this motive. The monotheistic consciousness, in a measure lacking this original motive, and being more absorbed with the present relations of man with God and the divine law, would perhaps be slower in arriving at this belief. Before the distinction between body and soul arose, the soul would seem to perish, or at least to disappear with the death of the body, and death itself would seem to effectively block the way to any insight into the region beyond. We do not argue the case here, but simply point to the fact that the animistic belief in separate spirits would supply a germ out of which polytheism might independently, and in advance of monotheism, develop a doctrine of existence after death.

Whatever the origin of the belief in existence after death may have been, and however doubtful may be the question as to whether the monotheistic or polytheistic religions took the lead in its development, it is clear that the problem is one which presses for solution in all later and highly developed religions. Even Buddhism, which is atheistical and might, therefore, be pardoned for confining the life of man to the present state of existence, teaches that the soul can achieve immortality by becoming a Buddha. By travelling the way of salvation it may realize its ideal and become absorbed into nirvana, which may to the ordinary mortal mean annihilation, but to the Buddhist who thus realizes his ideal, death and even karma are overcome, and the soul becomes one with Buddha. Buddhism teaches a doctrine of limited immortality at least. Brahmanism does not teach the survival of the soul in any phenomenal sense. It even denies personal immortality in any ordinary meaning of that term. But we are not justified, therefore, in saying that Brahmanism denies immortality. On the contrary, the Brahman distinguishes between the phenomenal self and the real self which is not affected by the contingencies of life, and asserts immortality of this real self. Brahm *is* that *That art Thou.* It is the immortality of complete identity with Brahm.

Whatever may be true of early Judaism, in its later stages the belief in a life beyond death becomes clear. After the period of the Babylonian captivity there can be no further doubt on the question, and at the time when Jesus taught not only was the world of surviving souls or spirits believed in, but the Jews had developed also a doctrine of the resurrection of the dead body. The Mohammedan doctrine of immortality may be regarded as mainly Hebrew in its roots although it doubtless received some stimulus from Christianity. It is in Christianity, however, that the doctrine of immortality has received its most complete development. The two fundamentals of all religion are the doctrines of God and the human soul. We have seen that while the doctrine of God has been largely a heritage from monotheism, on the other hand, the doctrine of the soul has developed more under the influence of polytheism. Christianity fell heir, historically, to both lines of tendency, being vitally related to both monotheistic and polytheistic cults, and finding in its central idea of the mediational function of the Christ a point of synthesis and a point of development for both its theology and its anthropology. Christianity having worked out an ideal scheme of mediation between God and the human soul is in a position to develop ideally also a doctrine of immortality which finds its adequate expression in the symbol of *inclusion,* the life in the Christ that is included in God. The symbol of inclusion, the favorite symbol of Christian belief, holds in it the meaning that the Indian religions seek to express in identification with Brahm or the Buddha, the difference being that Christianity has developed in its doctrine of mediation a more vital idea of relation between the divine and the human, so that when it comes to representing the final state of the saved soul the Christian symbol is found to be more clearly consistent with the idea of personal immortality.

In showing how the philosophical forms of the fundamental religious ideas arise in the various religions, it has

not been my purpose to treat this as preliminary to a disquisition in the field of pure metaphysics. The aim has been, rather, to show that it is in the manifestations of the religious consciousness that we are to look for the objective working out of these ideas. This has been in pursuance of the general plan of this part of our investigation. Starting with the purely physical world, we endeavored to show how the concepts and methods of physical science lead on to a point or to points where their transcendence becomes obvious and the metaphysical interpretation of the world becomes necessary. A complete doctrine of physical nature thus involves a synthesis of the mechanical and the teleological. Then by traversing the rising scale of the sciences through biology, psychology, sociology, ethics and religion we found a progressive demand for synthesis. Everywhere we found the categories and methods of natural science applicable and necessary, but nowhere did they alone prove themselves to be adequate. The principle of natural causation and of scientific explanation everywhere called for its complement and fellow in the metaphysical construction of the world under the categories of thought and purpose. It was only in religion, however, that we were able to complete the synthesis in terms of the concrete and to connect the world of material phenomena and human and finite purposes with an eternal consciousness in whose all-comprehending thought and purpose they are grounded and reduced to rational unity. In religion also the spirit of man attains to certain fundamental ideas which bring its life into unity with the divine life.

CHAPTER VIII.

INDIVIDUAL AND ETERNAL.

In dealing with the problem of existence in an early chapter, we reached a conclusion that could without unfairness be called pluralism. The world resolved itself, under analysis, into a plurality of existents, some of these, objects, but all ejects so far as their real existence was concerned, except the self that knows, whose existence is given in an immediate deliverance of consciousness. *The existent that is not an eject is, therefore, a subject, and all objects are at the same time ejects.* From another point of view, also, the world seemed to resolve itself into pluralism. We found that the metaphysical interpretation of the world involves the translation of the scientific notion of substances or grounds of phenomena, into the notion of idea-purpose as the principle of teleological agency. But when the question arose as to whether this translation involved the postulate of some unitary idea-purpose apart from, or transcending the plurality, or, a plurality of idea-purposes with a *common insight,* we were not able to fully determine. The pluralistic alternative was at least open. It was only when we entered the world of sociality and there came upon a form of community which had at its basis a plurality of conscious agents, that we found the conditions of an experimental test of our problem available. A study of the social consciousness was sufficient, however, to convince us that while in sociality we have a form of

activity revealed, by virtue of which the conscious individual is able to transcend the walls of his own private consciousness and enter into the conscious lives of others; and by virtue of which the social organism is able to unify the lives of its members through the medium of a common consciousness, yet the social consciousness is able to solve the problem of unification only partially and locally. We saw how the world-movements as a whole transcend the guidance of calculable social forces, and we found it necessary, in order to prevent our social world from falling into the hands of accident and blind fate, to postulate an *eternal consciousness*,—one that was all-comprehensive and that could embrace the whole in the scope of its idea-purpose. The postulate of the eternal consciousness was also strengthened by the fact that the social organism fails to satisfy or to provide satisfaction for some of the most fundamental interests of the individual.

It was only when we entered the field of religion, however, that we found ourselves, in our religious experience, brought into vital relations with a transcendent being who becomes the central reality of our religious life and to whose agency and relations in the world only an eternal consciousness, one that determines the parts through the comprehension of the whole, would be commensurate. This led, as we have seen, to the affirmation of the eternal consciousness as the fundamental attribute of the deity and as the bearer of his transcendent ideas and purposes.

The first topic of this chapter is, then, the eternal consciousness, its existence and mode of relating itself to the world and to the individual existents of which the world is composed. The judgment that an eternal consciousness exists as a reality distinct from the social consciousness and the consciousness of individuals, has two roots, one epistemological, the other metaphysical. The epistemological root brings out the form of certitude by which the judgment of existence is supported. It is what we have called *an immediate reflective inference*. This does not

seem clear in connection with the developed idea of God, for here we are in an advanced stage of reflection where many inferences have already been drawn. If, however, we go back to the first act in which man affirmed the transcendent, it will seem to be an immediate inference of reflection. We must remember that religion is a phenomenon of reflection, and that the datum on which its judgment of existence is pronounced must be a reflective inference. That it is a first and immediate inference from its data will be most obvious, however, in view of the theory of the origin of religion which has been developed in these pages. The act in which reflection and religion have their common birth is the immediate inference of a transcendent cause of a unique experience. This inference does not specifically affirm an eternal consciousness, but it does assert the germ out of which the idea of the eternal consciousness is developed. The existence of the eternal consciousness is thus found to rest on an immediate reflective inference, a fact that is inconsistent with the intuitional theory of divine knowledge. Now the certitude of the first inference, which the apparent pluralism of the world of existents may seem to impugn, in the end receives metaphysical confirmation from all the considerations which have already been adduced to show that the eternal consciousness is necessary for the rational grounding of the world. These we do not need to repeat. Metaphysically, the existence of an eternal consciousness is necessary as the subject of that all-comprehending thought-purpose which can alone prevent the world from lapsing into irrational chaos. The certitude with which the existence of an eternal consciousness is held, is not one, therefore, which rests on what some would characterize as a basis of pure speculation, but on what, when it is truly apprehended, becomes genuine rational necessity. It has a root of immediate inference lying deep down at the very foundations of reflective knowledge.

How, then, is this existent to be represented as related to other existents? We seem to face a species of dualism

here between a pluralistic world and a being whose unitary character excludes pluralism. The criticism has been made on pluralism, which is a phase of realism, that it denies relation, or at least is inconsistent with relation, and that it denies unity and is atheistical. The first charge is answered and refuted by the discovery of the social character of the units of existence. We have reduced all existents to the one type which finds its analogue in the psychic, and have found the relation of interpenetration to be constitutional and operative even below the plane where sociality proper arises. We have only to treat our units of existence with real insight in order to lift them out of the category of relationless isolation. The charge that unity is denied and that the theory is atheistic is answered in part by the insight which arises in the religious consciousness and which, under the guidance of motives that are already familiar, affirms the existence and necessary agency in the world of a consciousness that is eternal. We have traced the roots out of which the judgment that affirms this existence has grown. The further evidence will arise in the consideration of the present topic, how the eternal relates itself to the world, and will be completed under the following topic, how the individual relates itself to the eternal. That part of our doctrine has already been developed in which it is shown how the eternal consciousness embodies itself in an all-comprehending and, therefore, unitary thought and purpose. We have also shown the connection of purpose with interest which in its subjective reference is selective, while objectively, as a principle of existence, it is conserving. Starting with the presumption of this eternal consciousness as relating itself to the world as a whole in its all-comprehending purpose, the question here is, How is it to become related to the plurally existent units of the world? The answer will be suggested by another question, How do we bring our general concept, purpose or interest which attaches to a scheme as a whole, into vital relation with the parts and details? We answer,

of course; by splitting up these universals into particulars, that is, by developing out of and under the general-purpose, specialized-purposes bearing vitally on the parts or details. This analogy holds here and no other is at all conceivable. The eternal and unitary purpose splits up or specializes into the pluralistic purposes of things. The criticism will be made here, however, that the things being presupposed as existents, we cannot say that this specializing purpose may not miss them and hit upon some other existents instead? But who said they were there already? On the contrary, we are just as well satisfied to assume their non-existence. It is the relation of the one to the hypothetical many, that we are considering. The question is, How does the one relate itself to the many? And we have so far given our answer. The specialized purposes are the purposes of these very existents.

But how? you may ask; and this brings up the question of mode. All through these long discussions we have been maintaining the doctrine that agency is the central thing in the universe, and this has led us to rejuvenate the idea of cause which some of our thinkers are disposed to discard as useless lumber. But causation taken as embodying the notion of agency is a conception without which no kind of science beyond mere description is possible. The moment we question mere fact and become curious about how the fact came to be or to be there, we are raising the question of agency and a question of agency is one of cause. On this general ground a fundamental distinction has been drawn in these discussions between the idea of natural or physical cause and that of final or teleological cause, a distinction on which the main synthesis of our work depends. Let us suppose that the one has specialized itself into the many thoughts and purposes of things; the *how* will be answered here by taking the ground that the energy or agency to which we give the name physical cause will be included in the form of agency to which we give the name of purpose, so that the purpose will effect its immediate

realization in the form of physical activity just as the purpose of the architect is realized in its last detail by the hammer of the mason. We have only to generalize this example in order to see how the divine thought and purpose may realize itself in the grounding of the activities of the physical world. There are two classes, but not two different species of existents,—the physical eject and the self that we know in consciousness. We have determined the physical eject to be, broadly speaking, an existent of the same species as the self, its physical character arising out of its undeveloped spontaneity. The last act of the eternal consciousness, then, in which it realizes the physical existent, will be the act in which some *individualized spring of spontaneity will begin to flow.* It will be an *institutive* act, therefore,—not simply the specialized idea-purpose of the divine,—*but this idea-purpose as a permanent center of individual energy.* Referring back to earlier discussions, we saw that, in developing the categories of the physical into those of metaphysics, the step that was necessary was to translate the notion of *ground* into that of *idea* and the notion of *natural cause* into that of *finality.* That conclusion coincides with the result reached here. In both cases the idea-purpose grounds the physical activity.

If we pass to the conscious self, the fundamental relations are the same. But there are also important differences. The self is a conscious individual and it is capable of thoughts and purposes of its own. A double problem arises, therefore, in its case, only part of which is germane, however, to this part of the discussion. We wish to know its existential relation to the divine, and also the relation of its thoughts and purposes to the divine thought and purpose. Now, regarding the existential relation, we have practically the same thing to say that was said before. The specialized thought and purpose of the divine grounds individual existence. It means just *me* or *you,* and this concentrated meaning, like the act of attention in psy-

chology, liberates the energy that I am conscious of as *my* energy. In short, the divine act is *institutive* and grounds that center of existence and conscious energy which I call myself. If it be asked whether the divine thought-purpose that institutes me is identical with the thoughts and purposes which I form and under which my agency is exercised, I am forced to deny this identity because the divine idea-purpose institutes *me*, the *existent self*, and *I* am conscious of being more than the *sum of my thoughts and purposes*. There is a permanent background or in-root of these thoughts and purposes, which is also included in my existence, and it is *an existent that is instituted*. The epistemological relation in this connection is also significant. We found in dealing with the problem of religious knowledge that the unqualified use of the principle of self-analogy in representing the divine nature or attributes leads to pure anthropomorphism. We must qualify all our conceptions with the touch of transcendence in order that they may be valid even as symbols. If the ontological relation between the conscious self and the divine idea-purpose in which its existence finds its spring were one of identity, then no such modification of concepts would be necessary. The modification becomes necessary because the relation is not one of identity. What the relation is I do not attempt here to fully determine.

Up to this point we have been discussing our problem from the standpoint of the eternal and its relation to the individual, or rather, its mode of relating itself to the individual. We now take up the problem from the standpoint of the individual itself. We mean by an individual, *one of a plurality of existents*, and we have seen that these are all of one fundamental type. But the only individual we know immediately is the conscious self and we thus take the conscious self as the type of developed individuality in general. We mean by an individual, then, a self that realizes its agency in the activity of thought-purpose and interest. Now, that the *existence* of the self

is not given in a bare presentative intuition is evident enough. In the first place, bare presentative existence is an abstraction, and only the mere phenomenon can so exist. But the self, if we mean by it the individual of which we are conscious, is not a bare phenomenon. Descartes' *cogito ergo sum* strikes near the mark but still outside, for while he identified the source of the knowledge of self-existence with a function of self-activity he yet considered the judgment of self-existence a spontaneous inference. It is not this but an intuition. In the consciousness of its own agency,—that is, in that conscious self-assertiveness which embodies itself in thought, purpose and interest, —the self has an immediate awareness of its own existence. There must be some point in experience where we touch real existence immediately and here it is. But the epistemological datum is not the only basis of our assertion of the real existence of the individual self. It is confirmed by the process by which the self defines and determines its individuality in experience. We have seen how it defines itself in contra-distinction to the objective world as an individual, self-maintaining, personal subject of experience, and how in relation to the objective world it embodies its agency in a series of categories which determine the forms of objective existence. We have also followed the process by which it unfolds its social, ethical and religious nature. All this is evidence of real existence. There is also metaphysical evidence in the grounds of perdurability which will be the closing topic of this chapter.

We go on, then, to consider the relations of the conscious individual to other forms of existence. The topic divides naturally into two questions; (1) that of the relation of this individual to other *ejects* of the pluralistic system; (2) the question of its relation to the *eternal.* In dealing with the first question, let us assume all that has been determined heretofore regarding the interaction of the world-units. We find in our analysis of consciousness that there is fundamentally only one form of existent, the psychic

or its analogue, and one mode of interaction, that with which consciousness makes us familiar. This determines the relation of the world-units in general as social or the analogue of social. We found on examining the form of interaction which we call physical and mechanical, that it implies a more internal reaction which is the analogue of the social. Assuming this, it is evident that our pluralistic world is not a world of isolated individuals, but a world of socially related individuals, whose very nature on the side of relatedness is that of interpenetration. Each individual is penetrable by other individuals and may enter into other individuals. *This is the basal fact of relation.* It refutes all those criticisms of pluralism that are founded on the supposed unrelatedness of the units of the world. Moreover, it is essential in order that the notion of interpenetration may not be carried to extreme, that the self-assertiveness, by means of which the individual keeps itself in being by the exclusion of other individuals, should not be forgotten. Interpenetration is achieved, not by aggression, but through *representation* and *sympathy,* and its great instruments are *imitation* and *suggestion.* The great lesson we need to learn here is that we may enter into the life of our fellow and influence it to any extent without ever becoming identical with him or actually thinking his thoughts, purposing his designs or feeling his emotions. The category of interpretation is not *identity* but *community.* We agree here with an observation of Höffding that "instead of marvelling at relation we ought to consider it the great marvel that anything should be unrelated."

A more profound, if not more difficult question is that of the relation of the conscious individual to the eternal. We have endeavored to define the mode by which the eternal relates itself to the individual through an instituting and conserving act. But we have seen that institution and conservation do not involve identity. There is a sameness, but there is a difference which seems to be constitutional also. We are dealing with the whole

question here. In order to determine *what* is instituted and conserved we must harken to the whole lesson of experience. It is not a matter of deduction but of the whole revelation of consciousness to science. Here the world of pluralism has its rights. It says that the many shall not be offered up to the one. They are real existents and their agency is real. Let us see, then, what *modus vivendi* is possible on this basis. In the first place, then, it is not in the first instance a case of adaptation to a one that already exists. It is rather the question whether the many *need* the one and *must* have it. It is on this primary consideration that the logic of the whole preceding discussion bears. Following the evolution of the synthetic method from first to last, beginning in physics and ending in religion, we found that at all points the necessity for unification was pressing. At any point in the compass, without *the one* the world would be left in fragments without any rational basis for plurality. From this "great argument" we conclude to the necessity of the one from the standpoint of the many. We return, then, to the question of *modus*. If the one is needed by the many it must be a need that arises (1) out of the existence and (2) out of the function of the many. Take the individual unit which we call self. The self as a real existent will require the *presence* of the one in that divine act which begets *existence* and in that divine *interest* which begets *conservation*. The individual self must be instituted and conserved. But we have contended that this institutive and conserving function is not one that involves the identity of the self instituted with the eternal that institutes. The self is not simply "*a piece of the absolute*" as Royce says (unguardedly I think), nor is the self simply a specialized *purpose of the absolute*. The many has its rights and the self is, in the first place, not merely a specialized purpose of the absolute, but rather the *existent which this specialized purpose means or intends*. This being the case, the relation of the self to the absolute is not that simply of a piece that

represents an undivided interest in a whole. It is the relation of an instituted individual, itself capable of having thoughts and purposes. The self may be included *in* the absolute and its existence may be a dependent, because an instituted, existence, but its complete identification with the whole or a part of the absolute is something that cannot be conceived. Moreover, this means the swallowing up of the many by the one.

Furthermore, we have the problem of the relation of the individual self to the eternal, as this problem arises out of the functions of the individual self. The self is a real individual which realizes its agency in the form of thought-purpose and interest. We have seen how the finiteness of this agency causes it to fall short in its relation to the world-movements as a whole and to postulate an eternal thought and purpose as necessary to the unity and rationality of the world. In view of this the question of *modus* comes up. How are the divine idea-purposes related to the finite idea-purposes of the individual? The relation here cannot be one of identity, since the agency of the individual self must be regarded as real. We have seen already that the reality of the self precludes its identity with the eternal. In like manner, the reality of its agency precludes its identity with the divine agency. How, then, can it be related? We have indicated *inclusion* as the idea of relation that is favored here. The many may be included in the one without losing its maniness or its individuality. But the *modus* is the pressing question. We ask in view of this, Are the divine purposes always victorious? and we answer in the affirmative, for we cannot conceive God as being defeated in his purpose. Again, we ask, Are the purposes of the many defeated? and we are obliged to answer that they are liable to be defeated. Aside from the liability to defeat through collision with other individual purposes, there is the certainty of defeat that arises from the possibility of collision with the divine purpose. But how

can the individual and the divine purposes collide? This brings us back again to the question of relation. We may interpret the unfailing realization of the divine purpose in a pluralistic world in either of two different ways. We may say that there are really not two purposes but one and that is the divine purpose. But that way is not open to us who have recognized the reality of the individual agency. We may say, on the other hand, that the two purposes are in reality two; that the individual's inception of his purpose pertains to the real exercise of his own agency. This gives us a world of co-existing purposes, liable to collide but one of which is predestined to victory. Let us ask how this can be. Well, in the first place it is the purpose of the one that is destined to triumph. And the one includes the many. This fact of inclusion, although it does not identify the many with the one but leaves scope for free individuality, is yet explanatory of the problem we are considering. We may defeat a man by direct opposition and in that case he fails of the immediate realization of his purpose; or by so directing the agencies which he also employs to compass his end, that they will be tributary to a final outcome which neutralizes or suppresses his end and realizes the opposite. The latter is the method of statesmanship. The divine purpose contemplates an end or ends to be realized and we cannot doubt of their realization. But finite purposes also exist in the same field and these may or may not be realized. Let us take simply the finite purpose that is realized. This may be either in harmony with or opposed to the divine purpose. If it be in harmony, no special problem will arise. But if it be opposed and is yet successful, a problem arises, and we wish to know how in such a case the divine plan can escape defeat. And it is in solution of this difficulty that we have pointed to the method of statesmanship. The outward agencies by which purposes are realized have the quality of "publicity,"—they are open to all,—and while one individual may seize upon them and render them unavailable for other individuals, this seques-

tration is impossible in relation to the eternal. All instrumentalities are open to the eternal and so his purposes may never be arrested or defeated. In the world of agency, then, the individual purpose that is hostile to the divine may go on and realize its immediate end. But it cannot compass remote or ultimate ends, for in this field the divine purpose is exclusive and to it the efforts of individuals, whether in harmony or in opposition, will be found to have been tributary.

We come, then, to the final problems of the agency and the perdurability of the individual self. Regarding the question of agency we have already reached some conclusions,—that agency is real and is one that can be exercised without clashing with the divine agency. There is a place in our world for real individuality and pluralism does not need to be sacrificed to considerations of unity. Now what we mean by the reality of individual agency may be expressed from the ethical side in the word *freedom*. There is in the world a place for the exercise of free ethical agency. We have already considered this question with reference to the individual's relation to the world, and especially in connection with the scope and function of natural causation. And we have seen that *the self determining itself to action as a subject of duty is a free agent and a vera causa.* Man's ethical self-determination brings results into the world that would otherwise not eventuate. We take this as settled and the question here is, Does man possess freedom with reference to the eternal? We answer yes, but subject to qualifications that have already come into view. Man is an ethical free cause in spite of his relation to natural causation. But in his relation to the eternal he is a free cause *by virtue of* his existential relation to the divine. This is a hard saying, but I think it worthy of all acceptance. Going back to our former discussion, the conclusions there which are predetermining here were the distinction we found it necessary to draw between the specialized purpose of the

eternal and the existent which it institutes; also the distinction we found it necessary to draw between the idea-purpose of the eternal, and individual idea-purposes. In neither case can identity be asserted but in both cases only the inclusion of the many in the one. Now we have seen that the power of ethical decision rests on a prior assent of the individual consciousness to the ethical demand or law as obligatory. This assent is prior to ethical choice, which is the decision to do one's duty in the specific form in which duty presses. The assent is that fixation of ethical attitude which is evidently congenital and predetermined in the divine act by which we were instituted. We are not free to assent or not, we simply assent. Ethical choice, however, is the act in which we chose to do or not to do our duty. And the very fact that we are free *to choose not to do,* is proof of our liberty here in our relation with the eternal. We do not say that the eternal could not constrain us here. We only say that it does not and that ethical choice is free in its relation to the divine and therefore, a *vera causa.* It is possible for me to be a wicked man and yet to be free in my relation to God. Though I am wicked I assent to duty. This has not been left to my option. But I may choose not to do my duty and I may work wickedness. All this is in my province. I thus become a *vera causa* and bring results into the world which oppose the eternal. Nevertheless my wickedness is limited and God is not mocked. For the wicked man, in so far as he wills wickedly, is short-sighted, not seeing that all instruments are open to the eternal and that, too, while he is temporarily realizing his wicked aim. In the long run when ultimate results are counted he will find that the instruments which he used for evil have conserved the good end which he hates.

We reach here the final theme of this chapter, that of *perdurability* or the problem of the immortality of the soul. A study of the history of religions shows that the belief in the continued existence of the soul beyond death is very old. Tylor in his *Primitive Culture* traces its develop-

ment among savages from what he calls the "*continuance-theory*" to the "*retribution-theory*" in which a system of eschatology has been built up on the basis of continuity of existence. That the idea and the belief in immortality are deeply imbedded in the constitution of the race is one of the most evident truths of history. But our special concern here is not with the historical, but rather the philosophical aspect of the subject. Why should man covet immortality, and what grounds are there on which a rational conviction of immortality may rest? The question as to why the individual should covet immortality is only partially open. Nature seems to have put a congenital foreclosure on that question so far as the normal man is concerned. To the plain man the cessation of life is an end to be avoided, and just as he looks forward to to-morrow's continuation of life as desirable so he looks to that indefinite continuation that extends beyond death as desirable. The assent to immortality as desirable seems to be congenital. But the question may be raised and modern pessimism has taught us that the denial of the desire to live is possible. Why should man desire a continuance of existence? Well, a continuance of existence means more life, and to most men more life is desirable. But if not, then more life means more development. To the one who would perhaps find a high kind of satisfaction in denying the mere desire for more life, the prospect of more development would be alluring, particularly when this development is connected with high moral and spiritual ideals whose realization is conditioned on this continuance. Finally, if through religion the individual has come to include his life in that of the eternal, it is inevitable that he should put the highest value on that conception of the scope of life which is most consistent with the ideal of life which he regards as alone of supreme value. When connected with this higher outlook it would seem that only to those who have absolutely despaired of life and its ideals can immortality seem to be undesirable.

We may ask, then, in conclusion, what grounds there are for a rational belief in immortality? Well, there is the almost universal belief in it in some form by our race. This, of course, may have very little force. Then there is the fact that science not only has nothing to say against immortality, but certain branches of investigation seem to be discovering facts which bear in favor of the ability of the soul to survive temporary separation from the body. Civilized man thus seems to be *en route* toward the verification of one of the early stages of savage belief in its development of the doctrine of spirits. But this consideration at this stage may be regarded as of at least doubtful value. The considerations which have undoubted value are chiefly the ethical, religious and metaphysical. Regarding the ethical reasons for belief in immortality, I think the true principle of evaluation has been struck by Kant who first vindicated that view of ethics which makes the ethical ought a *vera causa* in the world and man a free agent in so far as the ethical ought becomes his motive. The ethical ought is simply an ideal of life which is to be realized in conduct and character and the pressure of this ideal is in the direction of an existence that shall be commensurate with the destiny which duty imposes. Kant says, in substance, that from the standpoint of moral ideals the life immortal, that is, the life not determined by temporal limits, is not simply desirable, it is a *rationally necessary* condition of the validity of the ethical ideal. Let us take this as the evaluation of immortality from the ethical standpoint. Through religion we are brought into relation with the ethical and with the life of the eternal. Religion thus inevitably leads to the subordination and postponement of the life of time and sense to the life of the eternal and the spiritual. This is the only life that has value, inasmuch as it is the only life in which we can come into close relations with God. Religiously, then, the immortal or, as it were better called here, the eternal life, is not only desirable, but it is the rationally

necessary condition of realizing the religious ideal. Metaphysically, the eternal life is the life of the whole. It is life in its infinite completeness. In its ideal spiritual aspirations the soul looks back toward its roots in the divine nature as well as forward toward the ideal fulfillment of its purposes in coalescence with the purpose of the divine. We have seen that the individual soul is ushered into existence by the eternal; that it is maintained in existence by the eternal and that the end of its striving is that the purpose of its life may coalesce with the purpose of the eternal. To such a being the ethical and the religious seem to be but broken lights of immortality. The whole illumination breaks in when the soul, having put all the partial lights together, begins to realize that it is hedged around with the divine and that the natural aspiration of a being like itself is toward the eternal.

CHAPTER IX.

SIN AND RETRIBUTION.

THERE is a distinction to be made between sin and evil. Evil is the genus of which sin is the species. A distinction is also to be recognized between two senses of the word good. There is what we call natural good because it is that for which all conscious beings strive. This is satisfaction. Every conscious being seeks the satisfaction of its own nature. And since satisfaction lies also along the line of conservation,—for reasons that are biologically intelligible,—it follows that every conscious being naturally seeks the fullness and completeness of its life. Put in different words, it is the nature of living things to seek more life. Were the lines of satisfaction to diverge, however, from those of life-conservation, the animal would continue to follow the lines of satisfaction unless some conflicting motive were to arise strong enough to turn it again into the channel of life-conservation. The immediate motive and end of natural good is, therefore, satisfaction, while its more ultimate and more remote end is life-conservation,—an end that may come into conflict with the motive of satisfaction. We reach an adequate conception of natural good, I think, in the idea of satisfaction in the pursuit of life, and inasmuch as the consciousness of the self has been found to include that of its other as well as the satisfaction of its other, we may still further qualify our conception and say that natural good consists in self-satisfaction in the

pursuit of life. Natural evil would then be the perdition of this self-satisfaction in the pursuit of life.

Let us apply to these two opposite concepts of natural good and evil as thus defined, the terms happiness and misery. The natural good of conscious beings will be happiness, their natural evil, misery. But natural good is to be distinguished from the species of good which we may call *ultra*-natural, not in any transcendental sense of course, but in view of the fact that the natural man, when we get down to him, may rebel against the ultra-natural good and choose to follow his impulses. This good might be called ethical or spiritual, but it has a pre-ethical or non-ethical stage. We have seen that the lines of immediate self-satisfaction and life-conservation may diverge, or at least may seem to diverge and come into conflict. It is then that the issue arises between the motive of natural good and another motive arising out of the need of life-conservation, which, so far as it prevails, involves a temporary inhibition at least, of the motive of happiness. The animal possesses this power of postponement and exercises it whenever it abstains from a present gratification in view of something anticipated in the future. We have no reason, however, for supposing that the animal has attained to any abstract conceptions of life by virtue of which it makes its postponement. On the contrary, the motive of postponement will be of the *same species* as that of immediate satisfaction, only stronger. The avoidance of the evil threatened, or the enjoyment of the good anticipated, will seem to be more desirable than the present gratification. The remote end will promise more satisfaction of the natural desire than does the present yielding to impulse. The consequence will be that the impulse to present enjoyment is inhibited and the animal practices a species of self-denial. All this, however, may with reason be included under the notion of natural good and we may regard any concept of good as natural that does not involve other content than the satisfaction of natural impulses and desires.

The notion of ultra-natural good originates with reflection and involves the function of abstract ideas. Let us suppose that the conscious being, who is now a human in some stage of his experience, has begun to reflect on life and has made the discovery that the real interest of life will sometimes come into conflict with the happiness of the present. Suppose that a conflict has actually arisen and he is involved in the *Sturm und Drang* of conflict. If he yield to the natural motives he will decide for the present happiness, but if the more remote life-interest prevail he will be conscious of having inhibited the craving of the natural man in the choice he has made. There need not be any ethical element in such a choice; it may be dictated by ordinary prudence or regard for welfare, and we may well characterize it as the judgment of good sense.

It is in the sphere of the ethical and spiritual, however, that the distinction between natural and ultra-natural good becomes clearly defined. In the ethical situation we become conscious of the presence of a new factor,—not simply the pressure of motives of happiness which involve considerations of prudence and good sense, but the pressure of a law that obliges and presses with the uncompromising force of duty. The ideal of good which presses with the force of obligation and to which we assent is one whose content is duty. And while it is possible to translate even the ideal of duty into terms of self-realization and through this to relate it to happiness, we undertake an impossible task when we essay to identify the notions of duty and happiness. Duty is more closely identified with the notion of life-conservation than with that of happiness and, like it, may come into even sharper conflict with the happiness-motive. The ethical good will embody itself in forms of social obligation and duty which involve the inhibition of strictly individual ideals of good. It will take on still higher embodiments in the sphere of religion where it culminates in the concept of the highest good as

realized in the unity of the human and the divine in a life that is conceived to be eternal. The higher convictions will find their ideal fulfillment in this highest realization of ultra-natural good. In the ideal of religion, therefore, the elements of self-realization and happiness are found to be ideally united.

Evil may also be distinguished as of two species; the species natural and the species which we shall call ultra-natural, or moral and spiritual. In the first place, what do we mean by the term evil? We have seen that good in its completer sense means more life,—the fuller realization of the life-ideal. The idea of good is positive and constructive, therefore, and its law is the law of being and life. Anything that conserves good will also conserve being and life. Whereas anything that really conserves being and life ought also to conserve good. Evil is the opposite of all this: it is negative in its character and destructive rather than conserving. Natural evil will be the enemy of life and happiness and will embody itself in such forms as pain, suffering, accident, disease, poverty and death. Everywhere it will be found to be the enemy of natural good and everywhere the struggle for the realization of the good will be a struggle to overcome and suppress the evil. Let us briefly consider at this point these various forms of natural evil. As to *pain,* no one denies that it is an evil, but this is to be said regarding both pain and pleasure. In themselves they are simply original forms of consciousness and, like other forms,—like consciousness itself for that matter,—are neither good nor evil. What I mean to say is that it would be absurd to call any of the primary forms of activity which our world presents, either good or evil. They are there simply as first data from which all our concepts of good and evil are to be determined. We can only determine the good and evil in view of some aim, happiness or life-conservation, which conscious beings place before them as objects of realization. We have seen that the natural object of con-

scious striving is happiness, or more completely stated, a fullness of life that conserves happiness, and that natural good and evil are to be determined with reference to this end. Now pain and pleasure are not so much evil and good in themselves as the primary elements of the conscious world out of which arise those secondary reactions in which our conceptions of good and evil are formed. Pain is an elementary fact in the world and cannot, as such, in what we may call its *first intention,* be regarded as either good or evil. Taking it in a second intention, that is, as related to the life-movements by which natural good is realized, pain may be regarded as either good or evil. As a sentinel standing guard between the use and misuse, between the normal and the excessive exercise, of the life functions, pain is a good, inasmuch as it is the co-efficient of excess or abnormality which nature employs in order to ward off evil and conserve the good. In such a case we do not say that pain is evil either in its first or second intention. It is disciplinary and regulative, and no affliction even of the disciplinary kind is for the present joyous but grievous. We may then exclude pain, as nature's life-warden, from the category of evil. It is only when pain embodies itself physically in some form of disease, or in poverty or some emotional form such as misery or wretchedness, that it can be properly called an evil and dealt with as such. The reason of this is obvious for it is only in these forms that its hurtful bearing on life and happiness can be clearly made out.

We have remaining, then, the dismal sisterhood, suffering, accident, poverty, disease and death. Of these it may be said that suffering is the form which pain takes when it ceases to be instrumental and becomes negative and destructive. It is true that even suffering may have its uses and may lead to good,—to a good of the highest spiritual quality. The road of suffering may be the pathway to the highest sainthood. But we are considering it here in relation only to natural good, that is, the conservation of

natural life and happiness, and it is clear that when the moral and spiritual perspective is eliminated the prospect becomes one of pure evil. Suffering is an incubus and must in some way be thrown off or removed before the good can be attained. We have to repeat here that what we are saying has reference strictly to what has been called natural good. If we include within our perspective the higher issues of life, then it would cease to be true in a measure that suffering is an evil. It would only be irremediable suffering, or suffering that is serving no good purpose, that could be called unmixed evil. But from the point of view of natural good,—that of the naturalist and the physician,—while pain may be a means of health as the surgeon will testify, yet suffering is something to be relieved and eliminated as a menace to the interests of life.

If we turn to the next of the dismal sisterhood, the category of accident, it must of course be recognized that there is a point of view from which neither science nor metaphysics can recognize accident. If the world be rational through and through, then it must be true that every event has its reason somewhere in the system and that every movement of the world is included in some purpose. It is possible, however, to be perfectly sound in this faith and at the same time to recognize the reality of that point of view from which the world becomes a theatre of accident and caprice. We cannot, of course, regard this aspect of the world as representing its *absolute* character, for to the absolute there will be nothing accidental or capricious; but it may be real from the point of view of the finite, and in fact it is an aspect of experience which cannot be denied. We have to ask, then, how accident may enter into the world and in what sense it is to be regarded as evil. If we conceive a multitude of finite individuals prosecuting a plurality of finite purposes, it is possible, in the first place, that these purposes have not been completely co-ordinated, and, in the second place, that any or all of them may have been developed without full knowledge

and regard for the material forces which surround them. Two kinds of clash are possible, therefore, wholly outside the sphere of intention and perhaps, and also, of prevision, —the clash of individual uncoördinated purposes with one another and the clash of conscious purposes with unanticipated material forces. This analysis might be carried farther and sources of unforeseen clash be pointed out between individual purposes and those purposes in which the common interest, social or political, embodies itself; but the principle of the representation is clear. Now it is evident that these clashes may arise beyond the sphere of finite intention or prevision and that so far as the agency of the finite individuals is concerned, they happen without design and will be accidental. Nor can we be sure that this feature of accident will be removed completely even by the co-ordination of the absolute purpose, for we have seen that the absolute purpose realizes itself by comprehending and co-ordinating the activities of the finite agents under a final unitary end in which the good of the finite is conserved and realized. This does not, however, involve the suppression of the accidental in the sphere where it arises. There is a true sense in which accident is a final and irremediable category of the finite, and it is in this sense that it is to be regarded as evil. If accident were mere appearance, or if the sweep of the infinite removed it from the finite sphere so that it became a mere passing phase of things, it could scarcely be called evil in any serious sense. But if the clash of accident be a constitutional peril of our finitude and threaten us permanently, the case is different and it is possible to see in it a ground of justification for the pessimist's despair of the world. If we are everlastingly exposed to the peril of the overthrow of our plans by forces that, so far as finite agents are concerned, are extra-intentional, then there is a very real sense in which our whole finite world becomes the victim of caprice, and a keen appreciation of this is very likely to drive men into pessimism. In view of the

reality of accident, it is not difficult to see how it is to be regarded as an evil. There is nothing constructive in accident; it is purely destructive; it interferes with and thwarts the good purpose and takes its place, therefore, among the forms of objective evil.

The third of the dismal sisterhood which we are considering is poverty, and we have to determine here in what sense poverty is to be regarded as an evil. There can be no question that poverty causes the most acute suffering and is thus the occasion of evil. Poverty is simply the excessive limitation or restriction of man's power over the external means that are necessary for the realization of his good. There are restrictions and limitations which are incident to our finitude and which, in order to overcome them completely, it would be necessary for us to become infinite. But poverty is an extreme and abnormal restriction of resources, a restriction which goes to such excess that the individual is no longer able to command the normal resources for realizing its finite good. In this sense it is clear that poverty is an evil. It tends to the defeat of the good and to so eliminate the elements of satisfaction out of life, that life itself loses most of its value and the victim of extreme poverty looks forward to death as a welcome release. In so representing poverty we do not overlook the fact that, like adversity, it has its uses and that some of the highest moral and spiritual results may be attained in the struggle with poverty; but it still remains true that poverty in itself is a natural evil and that it only becomes a means of good when it is connected with a life-purpose in which moral and spiritual ends are supreme.

We come at length to the twin sisters, disease and death, which together seem to monopolize the whole foreground of our world. That disease is an evil the rankest folly would not deny. Disease in its very essence is a parasite and an incubus; it is something that destroys the forces of life and blocks the way of the individual to the realization of his good. Disease means the decay of the

physical and through it the derangement of the mental. Disease is the prelude to suffering and death and it is so prevalent that it constitutes a whole aspect of the world. Just as accident and caprice from one point of view affect the whole of life, so disease is a constant menace, if not an actual affliction. And death—what shall we say of it? Death is a mystery; but externally it is the defeat of life, the destruction of the individual so far as he is a physical organism; the absolute termination of his struggle toward the realization of the good. "Who will show us any good in the grave whither we are all tending?" is the lament of the human spirit in view of this perdition of all its hopes. It is clear that in death we meet a form of evil for which there is no natural remedy. It is rather one of those facts which in itself seems to be as primary as life. Yet, like pain, in its first intention it can scarcely be regarded as either good or evil. It is simply one of the data in view of which good and evil are to be determined. It is only in relation to life and as the apparent destroyer and conqueror of all life's aspirations and ends, that it becomes the symbol of the greatest evil. Whether it be what it seems to be, there is no means of determining from the plane of mere natural good and evil. The problem of death belongs rather to the plane of the moral and spiritual.

Leaving death out of account, however, and bearing in mind that pain is an evil only when it embodies itself in some form of suffering or disease, the point on which we wish to put the emphasis here is the fact that all these forms of natural evil are *remediable*. They do not in any aspect of them present a hopeless problem as though the world had somehow been fashioned by an evil deity. Doubtless they present grave issues and there is some reason for the pessimist's cry of despair. But they are not irremediable. Natural evil presents a problem for natural science as well as a task for the philanthropist. It is open to science not only to understand and theorize these

evils, but also to fight them, to discover the means of removing their conditions and the kind of medication that is needed to restore health and happiness. It is the business of philanthrophy to bring all its resources to the task of intelligently fighting and removing these evils both in their social and individual forms. And it is the business of the individual outside of the scientific and philanthropic spheres of action to fight the battle of life against these evils in so far as they are personal to himself. They embody the great adversary which he has to overcome and it is out of the struggle to overcome that is to come the choicest good of his own life.

We have distinguished between the two species of good and evil, the natural and the ultra-natural, and have treated briefly of natural evil. The species which we have called ultra-natural and which is ordinarily considered under the category of moral evil,—is one that is rooted in ethical soil, but in some of its most important aspects belongs more to religion than to ethics. Moral evil arises in the subjective sphere of choice and volition; it is partly a matter of attitude. Kant put supreme emphasis on this fact when he affirmed that there is nothing unqualifiedly good except a good will. He meant that the principle of all moral good is the good will,—the will that assents to the good and that wills it in a law that is to bind itself and all other moral beings. Now moral evil has its spring on the subjective side and is primarily an attitude of *dissent* from the good. We have already considered the question of the possibility of such a dissent from the good. It arises in the presence of duty which presses and the obligatoriness of which we recognize, but which we nevertheless choose not to perform. Recognizing some conduct as our duty we nevertheless refuse to perform it and choose some other content for our ideal of good. Moral evil arises and we become morally bad men when, knowing the good, we choose to disobey the law and to do that which is evil. It is important of course to distinguish between

the subjective and objective aspects of moral evil, for to will the good is not sufficient unless we are also scrupulous in determining what the good is. The good intention may be linked with bad performance. In this case, however, we do not call the agent a bad man even though we should conclude that he ought to be restrained behind prison bars. Where the will is unmistakably good, the attitude of the agent is fixed. He wills the good although folly or short-sightedness or stupidity or some other unethical cause may connect this attitude with bad performance. We recognize the accidental character of the combination and proceed to remove its unethical causes.

The idea of sin is not inseparable from that of moral obliquity, although it is closely allied with it. We do not characterize as sins ordinary transgressions of moral law. It is only when these transgressions are heinous, as in the case of lying or murder, that we are in the habit of calling them sins. In fact, there is a personal implication in sin that is not found in the notion of ordinary moral transgression. We sin against another when we inflict some grievous personal wrong, and we sin against the state when we commit treason which possesses nearly all the characteristics of a personal outrage. The idea of sin is more distinctively religious, therefore, than ethical. We have the sense of wrong-doing when we disobey the law of duty. We have the sense of having sinned in the full meaning of the word only when we have neglected or disobeyed the law of God. The law we break when we sin must be a law at least which has a divine sanction, and it is this no doubt that has brought the sense of sin into connection with some offenses against laws and ordinances that are not directly divine institutions. But the laws of the family and the state bear in general to the religious mind, the divine sanction, and their violation gives rise in it to a certain sense of sin. After all, however, the sense of sin has a distinctively religious root. The Hebrew king and poet, after committing the most outrageous

crimes against his fellow men, is able to say in his contrition before God, "*Against Thee and Thee only have I sinned.*" We have only to take the religious attitude in order to understand the sincerity of the utterance. David is a murderer and an adulterer, reeking with blood and impurity. How can he appear before a pure and holy God who hates sin and defilement? However atrocious his offenses against his fellows, his offense against God is infinitely blacker and more heinous.

In another chapter we have considered the definition of sin in both its negative and positive aspects. We saw how it includes in its notion both the functional and the congenital points of view. If man be a sinner at all he is a profound one and his sin must be connected with the congenital conditions of his life as well as with the sphere of conduct. For the historic roots of sin we should have to look back to the origin of his experience as a religious being, while for its psychological and biological roots we must look into the depths of his nature. Let us consider some of the psychological roots of sin and then ask the question as to its historical origin. Our analysis of the ideas of good and evil has led to the distinction between natural and ultra-natural good. We saw also how conflict might arise between the motives of the natural and the ethical motives of duty. Moreover, the conflict may be carried up into the religious plane and the issue may be one of natural impulse or some ideal of natural good, *versus* the divine will or law. Here we have a spring out of which sin may emerge, for impulse and desire may pull against the divine command and the soul, while it assents to the divine law, may chose the natural good and disobey God. Thus sin would originate. Again, man is a finite and an imperfectly developed creature. His finitude expresses itself in the limitation of his powers and in his imperfection, in the possession of a constitution that, at the present stage of its development at least, shows a kind of tilt or overbalance in the direction of the purely natural and

sensuous life. In addition to this natural tilt, which is of course congenital, there are certain special congenital predispositions which are hereditary and which give the organisms inheriting them a strong bent toward some form of the natural life that would be abnormal and criminal. There is thus the normal tilt and, in addition to this, the abnormal, both of which may be regarded as constituting congenital predispositions to sin. If we combine the strictly psychological with the biological and congenital roots, we shall not be at a loss to understand how man can be by nature a sinful being.

For the historical origin of sin as a feature of the life of humanity we must look back toward the point where the religious experience of the race began. Without debating the question how or when that experience arose, we are in a position to say with great certainty that religion would not long antedate the appearance of sin in the world. Why do we say this? Simply in view of the study we have made of the roots of sin in man's nature. With the tilt in favor of the natural and the sensuous, the primitive man, whoever he was and wherever he first became a religious being, found himself in a position where a struggle would inevitably arise between his natural will and the divine command. It is the general psychological situation that supplies the basis of positive judgment here and not any local circumstance of time, and place, and conditions of origin. All we need to know is the psychological and biological facts about the nature of man, and all the rest will be clear.

We have already indicated what theory of primitive man seems to be most in consonance with the facts of history, so far as they can be ascertained. The stage of history which the study of the lower races is opening up to us is that of savagery. The age of savagery is followed by that of barbarism. Above the latter we have the era of civilization. In the age of savagery, judging by the facts that are available, the great business was the development of the religions

of the peoples. 'Everything else seemed to depend on religion. The great business of barbarism was, however, the origin and building up of the various forms of political control. Men had to be forced violently together in large masses in order that the political instinct might be developed into cohesiveness. The age of civilization is that of the synthetic development and flowering of all the elements of life and culture. If we be guided here by a great analogy, we shall find in the period before that of the savagery that we know, an age which we may call that of primitive man, a period of the origins of the elements of human as distinguished from animal life. The great epochal step in connection with all these origins would be the rise of man out of the condition of animal spontaneity where he is incapable of abstract ideas of reflection, to the level of a reflecting being. We have given our reasons for thinking that this step is the one in which religion would originate. Putting this in other language, we have given reasons for thinking that man's first act of reflection would constitute him a religious being, inasmuch as only the extraordinary phenomena connected with the awakening of the religious consciousness would be adequate to effectively break the crust of his spontaneity. The first religious man would be the genius of his tribe or race, and his tutorship would be instrumental in leading his fellows from the animal life to that of religion. The only other supposition that could be advanced here is that, after man reached the human stage of reflection, there was a period when he was non-religious. Then he discovered religion. But what of this non-religious stage? How, in fact, could he break the shell of his animality if not through the shock of the religious experience? Bear in mind that there are absolutely no facts, and that any theory of origin is hypothetical. But in the present day if the event of some tribe of animals breaking the crust of their animality and becoming human in their intelligence should occur, how should we expect it to happen? by a simultaneous break

all along the line and without any unusual motive? or should we expect that the initiative would be taken by some genius, or group of geniuses, the most gifted of the tribe, under some tremendous stimulus? Clearly the latter would be more reasonable; and here in this tremendous stimulus we should have the conditions of the origin of religion. The result is thus reached by taking a rational theory of origin and connecting with it the function of the genius in introducing variations,—a function with which history and psychology have made us familiar.

We have only to combine our insight into man's nature, given by biology and psychology, with the theory of the origin of religion which seems best to comport with reason and history, in order to reach the conditions of the origin of man's consciousness of sin. If religion be co-existent with reflection, it is older than ethics and, chronologically, the ethical consciousness would develop out of the religious consciousness. What civilized man achieves, then, by passing reflectively through ethics to religion (the translation of our duties into divine commands), the primitive man would reach, in germ, in his first experiences of law. The first law to him would be the divine law coming to him as the will of his God. Now, if we can imagine a pre-ethical stage of religion (and most anthropologists believe that ethics and religion are separable), we shall have a situation in which man develops what we may call the *prototype* of a sense of sin, although it is not as yet the sense of sin as we understand it. We may suppose the primitive man, under the temptation of his sensuous nature, disregarding or disobeying the command of his deity. What would be the result? A feeling of terror lest he have incurred the wrath of the offended deity and an apprehension of impending punishment which he has incurred by his disobedience. The two feelings coalescing would lead him either to flee from the presence of the deity or to endeavor to do something whereby the anger of the deity might be

placated. The alternatives would then be escape or propitiation.

We have pointed out how, apart from and antecedent to the origin of animism, the use of the self-analogy would serve for the characterization of the deity, and how, out of this early characterization of the gods of the objective religious consciousness, an ethical element in the characterization of the deity would arise and a germinal conception of a God of righteousness. We have here, then, the conditions of the origin of the sense of sin proper, —*the sense of having disobeyed the law of one who has the moral right to command.* Before a God of righteousness whom he had disobeyed, man would feel himself a wicked sinner, worthy of any punishment the offended deity might adjudge to be just. We have advanced reasons for thinking that polytheism with its animistic root did not antedate forms of religion which, while not in fact monotheistic, were yet unitary rather than pluralistic in their spirit. This stage of religion Max Müller has characterized as henotheistic. It combines two features,—(1) objective origin, the gods being the personified object of nature, such as the sun, the sky, the lightning or the unknown cause of these; (2) a unitary tendency, manifesting itself either in a method of subordination of lower deities to a supreme deity, or, as in the case of the Hindu religions, in a process of concentration by virtue of which the divine attributes are all accredited to various gods in succession. This combination of objective origin and unitary tendency formed, as we have found reason to believe, the basis of a religious movement which never became completely absorbed into polytheism and which tended to monotheism from the beginning. Now the origin and one line of the development, of the sense and doctrine of sin, would be coincident with this monotheistic movement, and, coming down through Judaism and the worship of Jehovah, would form one of the antecedents of Christianity. But we have seen that Christianity had another important antecedent in

Hellenism and that it was mainly through contact with Hellenism that familiarity was obtained with the doctrine of transmigration and the other modes in which the doctrine of retribution had embodied itself. We are not yet speaking of retribution, however, but of the development of the idea and doctrine of sin in connection with the religious development of the race. Mr. Tylor connects the doctrine of retribution with the earlier belief in the continued life of the soul beyond death. This, however, would scarcely serve as a clue for the development of the sense of sin. If we confine our view to the animistic religions which are polytheistic in their spirit and form, we shall be likely to connect the development of the idea or sense of sin with the non-ethical form of the feeling of demerit which springs from the sense of having incurred the vengeance of the deity who is capable of doing harm to the offender and must needs, therefore, be placated. The feeling here would be little else than a lively anticipation of punishment, and would have scarcely any trace of the ethical element in it. This feeling would be still further developed by the sacrifices and gifts and charms and incantations and other means used to make expiation and placate the wrath of the offended deities. Then again, a most important means of the evolution of this feeling would be the *taboo*, the setting apart of things as sacred or accursed and the prohibition from touching anything thus tabooed. The history of the religious customs of the savages is rich in examples of the various manifestations of this non-ethical sense of sin (if we may be allowed to call it what it is not). Of course the feeling would vary, becoming more unethical and superstitious as religion degenerated, while in those epochs of religious reform in which even polytheism sometimes participated, there would appear a dawning of the ethical. Among the lowest tribes of savages would be found traces of this higher ethical sense and a feeling that sometimes approximated the idea of sin as found in the most advanced religions.

The sense of sin is accompanied with the feeling of *guilt*, and guilt is simply the negative side of responsibility. When I am responsible I am sponsor for the result and must make it good. So, when I have the feeling of guilt, I am conscious of being in for, or good for, that which means punishment or evil of some kind. Ethically, the feeling of guilt involves desert. I not only have not earned good, but I have positively earned that which is evil. The feeling of being justly liable to evil on account of my conduct is the ethical sense of guilt. Now the evil which guilt merits is retribution. *Sin* and *retribution* are, therefore, always close fellows. Historically, the origin and development of the belief in retribution is part and parcel of the whole history of religion. But it is especially connected with the development of the idea of the soul. Mr. Tylor connects it especially with animism, which first arrived at the conception of a life of the soul beyond the death of the body. Out of this belief in soul-survival grew the developed conception of spirits which were free from any special bodily connections. Mr. Tylor thinks the special doctrine of retribution a later development of what he calls the *continuance-theory* of the life of the soul. The savage ancestor first through dreams and ghost-visions developed the animistic doctrine of souls or spirits which are capable of living apart from the body. Upon this he built his theory of existence after death,—the continued existence of the soul. This continuance-theory was at first largely non-ethical. But in course of time, as men's moral ideas developed, Mr. Tylor finds that the continuance-theory experienced an ethical change, taking on the form of a *retribution-theory* and becoming part of the machinery of eschatology. In short, the doctrines of continuity of life and of the punishment of evil desert, which have had distinct roots, coalesced at an early (though not the earliest) period in the world's history and a retribution-theory, founded on the idea of punishment in a future life for the evil deeds of the present, came into existence. In this

connection Mr. Tylor points out the large part which doctrines of transmigration and metempsychosis have played in the ancient beliefs about future existence. He notes also a very suggestive distinction between theories which bind the soul to some series of bodily conditions connected with the working out of a cycle of retribution, and others which leave it free from such fate and in a position to work out its destiny in a more direct and personal manner.

Now it is true that the doctrine of retribution has had a history in which, no doubt, animism has played a major part in the early stages. Mr. Tylor's distinction between the two different ways of regarding the future of the soul has a suggestion, however, that seems to me to be valuable. We have already, in the chapters on religion, distinguished between a first and, in spirit at least, monotheistic tendency in religion arising out of the objective nature of its origin, and the mode by which the deity would at first be characterized. And we have found reasons for thinking that this earliest tendency was never completely merged in animistic-polytheism, but maintained a kind of distinct tradition, continuing the monotheistic and the ethical tendencies and representing in a kind of background a higher and purer form of religious belief. Connecting this with the fact that theories of transmigration and metempsychosis dominated wherever polytheism prevailed, and that the more personal form of retribution was found only in connection with the more distinctively monotheistic religions, like that of the Hebrews, who, while believing in a future existence, put very much less stress on it than they put upon the present, I think we shall be led to conclude that there is good reason for associating this more personal and freer conception which Mr. Tylor marks, with the ethico-monotheistic tendency in general, as not only one of its accompaniments, but also as its special fruit. The logical theory of animistic-polytheism would work out in the transmigration-series, and when the idea of retribution

arose, it would be logical for polytheism to employ the transmigration-series as its most effective instrument. But the monotheistic tendency, not being friendly to this mode of thinking, and responding to the more direct ethical motives of personality, would place more emphasis on the *direct* relation of the soul to God and much less on its connection with its materialistic conditions. The result would be, therefore, (1) a more spiritual conception of the life of the soul, and (2) a tendency to put the major emphasis, not on the future life, but on the soul's present relation to God.

Let us suppose, then, that theories of retribution worked themselves out along these lines. We should have reason to suppose that animistic-polytheism would identify itself more closely with theories of transmigration and metempsychosis, that it would put the major stress of existence on the *post-* or *pre-*existence rather than on the present life, and that it would use the theory of transmigration as the most effective instrument of retribution. We should have reason, on the other hand, to suppose that an ethical monotheism to which animistic conceptions were not so germane, would rather hold aloof from theories of transmigration and conceive the post-existence of the soul in a more individual and spiritual manner, while putting the major emphasis at all times on the present life and its moral relation to God. If this be true, we can understand the reticence of the Hebrew scriptures, for example, on the whole subject of the future life, a reticence which some have mistaken for disbelief, but which is more consistent with the co-existence of the belief with the conviction that the vital issues of the moral and religious life are to be worked out in the present.

We may be thankful for this insight, and yet none the less so for those ultra-Judaic roots of Christianity which brought it into living relation with the traditions of a religious doctrine that had put the major-emphasis on pre- and post-existence and had on that basis worked out its solution of the problem of human destiny. For the

flowing together of the two traditions created a soil that was favorable to the reception and propagation of a central doctrine of the founder of Christianity; namely, *that all life is one and that the future is but the continuation of the present and only more real in the sense that it supplies more perfect conditions for the realization of the true ideal of all life.* Equal emphasis is thus put on present and future. *Life is all of one piece, because it is the eternal life from the beginning.* For this reason the Christ is said to have brought life and immortality to light.

The tendency of the higher religions is to individualize both sin and retribution, making them a more personal matter between man and his own soul or between the soul and God. The modern disbelief in theories of transmigration and metempsychosis rests on a sound ethical instinct. Just as the modern spirit reacts in favor of a more spiritual conception of religion, so it reacts just as strongly and just as effectively in favor of a more personal and less fatalistic conception of human destiny. This reaction has profoundly affected the whole conception of religion, and with it the conceptions of sin and retribution. Religion has become less an affair of ritual and public observance and more a personal matter between the soul and God. If men are now more reticent where religion is concerned than former generations were, it is partly at least because they feel *more,* instead of *less,* the personal pressure of God's presence in their lives. So in regard to sin and retribution. If men feel the "exceeding sinfulness of sin" less than formerly, it is no doubt due in part to a more adequate realization of the personal nature of sin. We have seen that sin is both congenital and functional. It affects the whole man and the whole man feels that he falls short of the glory of God. But the reflex of this,—the awful sense of guilt and impending retribution which is inseparable from the sense of sin itself,—will depend directly on our conceptions of God and his attitude toward us men. Christianity, in making the divine fatherhood cen-

tral, and in putting the major accent on love as the supreme attribute of this fatherhood, and in symbolizing on the cross infinite compassion and forgivingness, has been itself the great instrument in bringing about a change in men's conception of God and his relation to them. If this tends to dispel to some extent the fearful looking for of judgment, which characterized not only the ancient savages, but also the more modern Hebrews, we ought not to mistake it for a decline of religion, or even for an eclipse of the sense of sin. The whole effect of the Christian representation of God has been the elevation and spiritualization of his character in men's conceptions. He has become a more attractive and hence a less terror-inspiring being, and the modern soul that is truly religious has the impulse when it has sinned, not to flee from God, but rather to cast itself upon his mercy, feeling, with better reason than the old psalmist could have, that it would rather fall into the hands of a loving God than into those of the most merciful and just of men.

The sense of sin will always survive where the divine ideal is high and pure and where the feeling of personal relation is strong. For just in proportion as this is true will the soul realize its own worthlessness before God, and all the trumpery righteousness that it can summon up out of its own resources will seem as filthy rags. The idea of retribution will experience a corresponding modification. Just in proportion as the element of terror drops out of the sense of sin, and the soul loses the oppressive load of apprehension in the divine presence because it has learned to know its heavenly father better, so the whole conception of retribution will be modified. It will not consist so much in a fearful looking for of judgment and of fiery indignation, as in the apprehension of the loss of the divine presence and favor out of life and the consequent loss of the soul, that is, the higher and better self. The great retribution is this spiritual loss itself with all that it implies; a perdition so deep that all the symbols of punishment which the imagination can invent are unable to sound its depths.

PART III

DEDUCTIONS

CHAPTER I.

PHILOSOPHY AND EXPERIENCE.

In the division of this work just completed we have made an effort to show how the methods and concepts of science and metaphysics must supplement one another in order to develop an ideal of complete knowledge. We have seen also how knowledge everywhere develops in connection with the interests and demands of the practical life and how knowledge is in general a means and a necessary mediator in the satisfaction of these demands. We do not mean by this to favor the utilitarian idea of knowledge as *merely* an instrument of the practical, for we believe that knowledge has an intrinsic value and that it is worth while to know irrespective of the practical use we make of our knowledge. At the same time it is a healthy thing for the purveyor of knowledge to feel that his results are in general to be weighed in the scales of practical values and that they are likely to be discounted if they fail to bear this test.

Now it is just here in its practical relation to human experience and welfare that science has felt itself particularly strong and metaphysics has been supposed to be specially weak. Reserving the consideration of metaphysics for the present, however, let us here note some of the vital points of connection, both theoretical and practical, between science and experience. We employ the term science here in its distinction from metaphysics and in a sense to which the adjective natural may be applied; and we have seen

how natural science and metaphysics divide between them the whole field of knowledge. Now, there is a sense in which science involves a departure from experience. Science is not concrete but abstract, and its first effect is to break up the concretes it finds in nature. And having reduced these to abstract elements its further aim is to formulate the behavior of these elements into laws which are also abstractions. It is open to the plain man to have some doubt about science, and he may ask what use can be made in a concrete world of laws that are to such a degree abstractions. Let the plain man study the situation, however, and he will make the discovery that the abstractions of science are not so far removed from the pulse of reality as he thinks. The central fact about science is that it is concerned from first to last about one thing and that is what we call physical agency. It is through this concern that it vitally relates itself to experience, since man as a physical being is part of a physical world, subject to its laws and the bearer of needs and interests which only the physical can satisfy. Science relates itself to man through his relation to the physical world, and this is close and vital.

Moreover, the law of the physical world (I mean the law of its agency) is natural causation. Now, science, as we have seen, is concerned about nothing else, from beginning to end, than natural causation. Its laws all sum up aspects of this kind of agency, and they all become concrete when reduced to terms of causal agency. If now we take the standpoint of science and regard the world from the point of view of an observer,—say one standing on another planet,—we shall begin to realize how overwhelmingly important the physical is in comparison with what we call the mental, and how wide the sweep of natural causation is compared with what man calls his own self-determination. No marvel is it then that nature swells in the scientific imagination to such proportions that it threatens to swallow up man and his consciousness, leaving not even a trace behind. The standpoint of science is one

that subordinates mind to matter and consequently man to nature. From its point of view and its way of estimating values, physics will always be the queen science, while anthropology will tend to hide its diminished head under the mantle of physical analogies. Again, if we take into consideration the relation of science to the physical life of man, its utility is so clear as to preclude all debate. In fact, the physical life is rapidly becoming a problem for the engineer. Only the engineer seems to have direct hold on the resources of life while all others fall into a secondary relation. From the standpoint of the *modus vivendi*, then, it seems to be science, and science alone, that gets into close and vital relations with the physical life of man. But science goes deeper than the mere catering to physical wants. Man is a being who wishes to know, and this desire creates more refined needs which his investigation must satisfy. Science meets the desire for knowledge from one whole point of view. Taking the world as a system of physical forces operating under the law of natural causation, we naturally seek to reduce the infinite plurality of the world's phenomena to a few generalized points of view. Even then we are not satisfied, but seek further to reduce these generalizations to laws of physical agency. It is only when we have connected phenomena, through causation, with their grounds, that we feel we have reached anything like an explanation. Even then we are not satisfied, but go on with our investigation until on the one hand we have carried the physical elements back to the point of their utmost refinement, while, on the other, we proceed until we have reached a notion of unity which will enable us to reduce the world to one. Science is always seeking some Newtonian generalization in space or time or energy, which in the scope of its application will reduce the physical world to unity.

We have seen how wide the scope of science is in its own field, and what we have to add here is a plea for its necessity as an element in a philosophical doctrine of the

world. Philosophy has been defined as the idea of synthetic knowledge, and we have taken pains to show how science and metaphysics supply the terms of the synthesis. Now, the special point we wish to urge here is that science in some very important respects holds the primacy in this synthesis. It is difficult to see how without science there could be any rational metaphysics. Not only has it been the case that the great philosophers of the world have been vitally alive to science (and we have only to name Plato, Aristotle, Bacon, Descartes, Leibnitz and Kant in this connection), but such an investigation as we have carried out in the second division of this work is sufficient to bring out the fact that it is only in connection with scientific conceptions that a clear idea of the vital problems of metaphysics can be obtained. And it is not going to extremes, I think, to say that the points of correlation between science and metaphysics can be discovered only in the double light of both disciplines. Moreover, the method of science must be clearly conceived before any definition of metaphysical method is possible.

Our special plea here is, however, that experience itself includes science as one of its instruments and as a necessary means of attaining its own ends. We have seen how this becomes obvious on the practical side. Man cannot go far in the satisfaction of his physical wants without the aid of science. Nor can he even make a start in the satisfaction of his desire for knowledge, without science. There is a kind of popular knowledge that is not science, and this has its own value as the plain man's case goes to show, but this species soon reaches its limit, and, as a whole, it is found to be unreliable except for the roughest kind of approximation. There is, then, a threatened breakdown of the whole business of experience which is only averted by the rise of science and its exact methods. Whatever may have been true of the ancients, it is certainly the case that modern life would have been impossible without the aid of science. This help has not been merely practical. Modern

science has given us a new heaven and a new earth. It has enlarged our conceptions, revolutionized our methods and immeasurably extended the scope of our ideas of reality. It is not too much to say that the world in which we moderns live, if it had been dreamed by an ancient, would have been regarded as too extravagant for even the kind of credence that was then attached to dreams.

The truth is, when we begin to apprehend the vast function modern science has performed in the drama of modern experience the danger is, not that science will not obtain due recognition, but that it will claim a monopoly. This tendency can be redressed only by combining with a generous recognition of the place which science holds in the philosophical synthesis, an insight into the fact that there is another point of view from which consciousness becomes primate and leads to the concepts and methods of another discipline. The philosophical synthesis begins with science but it reaches its conclusion in metaphysics.

The metaphysical conceptions which we have developed in connection with the preceding parts of our work are such only as have been able to vindicate their vital relations with the processes of science and general experience. Now it has become fashionable in some quarters to preach a kind of divorce between what is called Reason, with a capital R, and experience, and to represent reason as in a position to lay down the law to experience. But such a divorce and such an attitude are possible only when a different concept of experience is held from the one adopted here. To us, reason is simply the voice of experience when it speaks, not fragmentarily, but in its unity. The doctrine that is here professed is one that regards experience as the medium in which the conscious self realizes itself and its world. Inevitably, then, it will find all its possessions in experience, and to this court its appeal must always, in the last resort, be made. That the appeal to experience, if no mere lip-service, will be revolutionary in many ways is only to be expected. In the first place, it will certainly strike a blow

at the heart of rationalism; for the inner citadel of rationalism is the claim that reason is vested with some independent, ultra-experiential authority by virtue of which it can put forth dicta that have the right of way over fact and may override the verdicts of experience. If this claim be successfully denied then the backbone of rationalism is broken. Now the only way, we are convinced, in which this end can be really secured is not by any sort of logical refutation, but rather by the laborious working out of a doctrine of experience in which the fact that reason is simply the voice of experience in its wholeness shall be exhibited in detail. This exhibition has been attempted in *Foundations of Knowledge* and in the present treatise; with what success, it is the business of others to determine.

The aim of this chapter is not a further vindication of the general doctrine of experience, but rather an exhibition of some of its most vital bearings on the problems of reality. In metaphysical reflection everything seems to depend, in the last analysis, on the mental attitude of the thinker. It has been a reproach of the metaphysics of the past, not altogether deserved, that it has been evolved too exclusively out of the inner consciousness of the individual thinker, and that it partakes too much, therefore, of the character of subjective speculation. It may be admitted that a characteristic weakness is here brought to light. The temptation to subjectivity may be regarded as one fruitful source of metaphysical fallacies. How, then, is this weakness to be overcome? We answer, by an attitude of thinking which refuses to regard reason, as it has formed itself in your thinking or in mine, as all-sufficient, and which recognizes with Socrates the amenability of individual judgments and opinions to the court of the social consciousness. By this I do not mean any superficial appeal to public opinion; but rather, an appeal to that common consciousness in which individual judgments survive, if at all, in a generalized and purified form. Such judgments were sought by

Socrates as the data of reliable science and philosophy, and his method is full of suggestiveness for the present day. It was not Socrates but the sophists who attempted to formulate the judgments of the social consciousness by simply developing an organon of public opinion. Socrates had the psychological insight which led him to see that true judgments could not be picked up in this factitious way, but must be developed by a critical exercise of the equating function of the social consciousness. This is what the Socratic dialectic meant as a method,—the critical exercise of the socially equating consciousness in order to overcome the subjectivity and local coloring of the individual judgment, and thus to translate it into a form of general validity. The need of this equating function as a means of objectifying and generalizing the processes of individual thinking is just as pressing now and at all times as in the time of Socrates. It is simply one form of the appeal to experience which the individual thinker must constantly make. Or, to put the case from a somewhat different angle, experience must be allowed to determine the thought of the individual thinker by shaping his thinking into an organ of a general objective consciousness and thus enabling him to pronounce socially equated judgments. Let us call these judgments the *precipitate* which results when the individual and the social consciousness have, as it were, chemically combined. This will indicate the method by which individual judgments may acquire objective and general authority. Now, the most perfect illustration which we have of the formation of such judgments is supplied by the sciences. It is coming to be recognized that science is not in any real sense a merely individual function and that the most essential aim of a true scientific method is to induct the individual consciousness into the objective general mold so that it will be able to speak from the outset as the organ of the general consciousness and not simply its own convic-

tion.[1] When it is borne in mind that results thus attained are subjected to further purification by requiring for them a consensus of a plurality of scientifically formed judgments, it will be seen how thorough the application of this kind of experience-test is in the field of science. And what is here contended for is the necessity for the use of the same type of experience-test in the sphere of the metaphysical judgment. In the nature of the case, the rigid form of science will be found inapplicable here, but the principle must be rightly applied and the metaphysical thinker must make a constant appeal to experience in this form, recognizing the fact that his thought, in order to be generally true, must be promulgated from a *pou sto* that is general.

We have taken the ground that there can be no rationality apart from experience and that what we call the voice of reason is only the voice of experience as a whole. This doctrine we wish to exemplify somewhat more fully at this point. If one asks what we mean by the rational, we shall be able to find no better answer than this, that it is the *congruous*. What is reasonable is congruous. But congruity implies some standard or ideal in relation to which the supposed fact is congruous, that is, with which it harmonizes. Where shall this standard be found? This is a crucial question in metaphysics. It is easy, of course, to say that the standard must be found in experience, as we have already said, but how is it to be found there and how are we to avoid mere relativity, if we erect experience into a standard of rationality? This question has not been altogether neglected in the preceding discussions, and what is said here will be more or less of a summary of what has

[1] The tendency to emphasize the importance of the social consciousness and the social tests of truth is well exemplified in the works of Ward and Stout in Great Britain and those of Royce and Baldwin on this side of the water. Ward's "general experience" on which he puts so much stress is a function of the social consciousness.

been more elaborately put before. There are at least three points that need to be emphasized in a doctrine that grounds rationality in experience. In the first place, we must set out with an adequate notion of what constitutes individual experience. If we realize the complexity of the elements of experience and the fact that in its processes the intellectual is inseparable from the emotional and volitional, we shall be prepared to admit that the rational cannot be any mere abstract idea of the logical intellect, but that it must be the voice of the intellect informed and motived by feeling and will; that it will, therefore, voice the whole concrete life and activity of man. The voice of reason will be the unison of the whole experience-complex and the demand it utters will be one that includes volitional as well as emotional and intellectual elements. It is true that we distinguish reason from feeling and will, but this only means, when we know what we are saying, that the reason-complex is different from the complexes which we call feeling and will. The reason-complex is a psychosis in which thought-activity is motived innerly by feeling-interest and will, whereas what we call, by way of distinction, feeling and will, are simply complex psychoses in which feeling and will are informed with thought. An intellectual process is one in which thought dominates and determines the form, but not necessarily one that is pure abstract thinking-activity. Now, characterizing the activity of consciousness in its concreteness as experience, it follows that reason will be this concrete experience uttering itself in the form of thought, and what we call rationality, or the criterion of rationality, will be the requirement of this thought-complex, that candidates for admission into its fold shall harmonize with experience as it expresses itself in this thought-unity.

This, however, is not the whole secret of rationality. It simply supplies the form which subsequent experience is to apply and develop. For, in the second place, the judgment of rationality must be further determined by passing through

the generalizing medium of the social consciousness. This will be necessary in order to free it from localisms and stamp it with true objective character. The principal moments in this process may be stated as follows. We have seen that the social consciousness develops in man in the form of selfhood writ large. Man as a bearer of the social consciousness is an organ of the social intellect, feeling, will, and his responses are to the requirements of a social self which is the bearer and subject of social relations and reactions. This social self will therefore relate itself to the private individual self as a larger objective self in which the narrower self is included and in which it finds itself, therefore, expanded and generalized. Inasmuch, then, as the spring of rationality is the voice of selfhood uttering the demand of experience as a whole, the voice of this larger, objective, social selfhood will become, when this translation of the private individual consciousness into the form of the general social consciousness takes place, the organ of a higher rationality which the individual will assent to as to the voice of its higher and more objective self. We see thus how experience determines the standard of rationality in this higher form.

But we have seen that the process of experience does not end with the generalized activities of the social consciousness. It goes on into the sphere of religion and to the apprehension of the consciousness of the eternal. And since it recognizes this consciousness from the outset as the activity of a being which transcends it in the attributes of infiniteness and absoluteness, its relation to this consciousness cannot be in all respects identical with its relation to the generalized social consciousness. The social is a generalization of the consciousness of just such beings as ourselves, and there can be no real social individual apart from you and me and other individual selves. The social is simply an extension of the finite consciousness into which we enter as our very own. Our relation to the eternal consciousness is not in all respects the same as this. There is the fundamental difference, to start with, that the eternal

consciousness is in its immediacy the organ of an infinite and absolute being whose activities ground and comprehend the world. But there is a true sense in which we finite individuals enter into and realize that eternal consciousness. We are not considering here the dialectic by means of which we achieve an approximating conception of the absolute, or the mode by which we come into intelligible relations with the being which transcends us. Taking all this for granted, we are concerned here to show that the only way in which a finite being like ourselves can come into real relations with the infinite is by becoming in a true sense the bearer of an infinite or eternal consciousness, and this is achieved, as Plato and all the religious thinkers, and Kant and all the ethical thinkers, have shown, in those higher realms of experience in which we find ourselves responding to motives and going out in activities the scope of which transcends any and every conceivable time-span, —the pressure of duty; the pressure of the ideals of the religious life; the responses which spring from the higher sense of the beautiful. In these experiences we penetrate into the realm of the eternal. This, however, is easily said but hard perhaps to make intelligible. Let us approach it from a somewhat different angle. We know that a man has the power not only to realize his experience successively in the links of a time-series, but also to integrate its moments, past, present and future, into one all-comprehending moment, and not only to contemplate it as a whole, but to function from the standpoint of that unitary consciousness. This, I apprehend, is the real standpoint of those higher experiences spoken of above. Now a consciousness that thus reclaims itself from the clutches of the time-series and acts as the organ of an integrated whole of experience, is, in its form, essentially eternal.[1] And such

[1] Royce develops substantially this conception of the eternal in the third lecture of the Second Series of Gifford Lectures on *The World and the Individual.* This is one of the most suggestive lectures in the series.

a consciousness, while it does not lift us to the divine plane or make us the equals of God, yet supplies a divining rod, as it were, which enables us to determine in conception the interval between us and God and to conceive how the infinitation of our ideals may translate them into forms of the divine experience. For just as it is possible for us to conceive our self-experience as realizing progressively larger and larger wholes, and just as we realize that each larger whole supplies the standard of rationality to that which is lower than itself, so the very inner trend of our experience leads us necessarily to the ideal of an eternal all-including experience,—the experience of the absolute, in which the standard of rationality is completed and grounded. This is the last stage in the development of the criterion of rationality. The requirement of reason, in the last analysis, is the voice of a divinely complete experience requiring that all lower standards shall be in harmony with itself. When we say, then, that reason is the voice of experience uttering itself as a whole, we mean, in the last analysis, that the final and ultimate standard of rationality is to be found in the idea of an experience that is all-complete and divine.

We have sufficiently indicated what we mean in general by regarding metaphysics as an organ of experience. This involves, however, the doctrine that experience as an all-inclusive term holds within it the distinction between the finite and the infinite,—the relative and the absolute. This we have frankly maintained all along. It may be well, however, at this point to reargue the question, in some of its most vital bearings at least. In a chapter in *Foundations of Knowledge,* on *The Absolute as Experience,* I have endeavored to show in some detail how the absolute, if it is to be intelligently affirmed at all, must be conceived in terms of an experience transcending our own but involving the same fundamental constitution and modes of activity. The only alternative to this is agnosticism which regards the absolute as a purely transcendent and unthinkable term. On this basis the agnostic either denies the reality

of any absolute, or else, affirming it, maintains with Herbert Spencer that our finite experience supplies no categories under which it can be in any sense defined. Now the existence of an absolute is a question we do not argue here. The grounds on which we assert necessity in the world have already been developed. Here the question is: Suppose that we have grounds for asserting the existence of an absolute in the world, have we any resources in our experience that will enable us to render this absolute in any sense intelligible? This is the question which the agnostic of Mr. Spencer's school meets with denial. We challenge the agnostic, however, to make clear how any purely transcendent term can ever be shown to be necessary. If the absolute be necessary for the grounding of the world or for the completion of our thought, then there must be respects in which the world needs grounding and our thought completing. And these respects lying in the sphere of finite experience, will be definable. Now in all the preceding discussions pains have been taken to show how and in what quarters the definable needs arise. But can definable needs be met and satisfied by that which is wholly beyond conception, of which we can form no legitimate idea at all? We must answer this question in the negative and say that if the demand for an absolute be an intelligible demand founded on definable needs of the relative and finite, then it follows that the absolute itself which is required will be some nature or being so far forth intelligible. The trouble with modern agnosticism arises from a cause similar to that which has ruined the Cartesian philosophy. It sets out with the assertion of a complete dualism between the relative and finite, and the absolute and infinite. They are mutually exclusive terms, each being the simple negation of its opposite. Naturally, then, the finite can develop no modes for conceiving or representing the infinite. But the logic of this position strikes deeper than the agnostic thinks. If the cleft be so radical, then the claim that the absolute is bound to the relative

by necessary implication is pure illusion and the absolute drops out of existence: there is only the relative and its affairs, and the absolute is a mere dream. The agnostic with whom we are dealing here would repudiate this conclusion, but in doing so would also subvert his own premises; for if the absolute is to be maintained at all it is because of its real connection with the relative, and if this connection be real it will also be definable in terms of that which the relative in some sense requires. But the relative does not require that which lies wholly outside of it and negates all its forms and processes. The only kind of demand the relative can entertain for that which it does not itself contain, is a demand for completeness in the respects in which it is incomplete. Let us, for example, endeavor to complete the world on a purely mechanical model, representing all movements in terms of external impact or propulsion, and it immediately cries out for some fountain of spontaneity, some self-initiative of motion. Let us represent the world strictly under the category of natural causation, where every activity is conditioned by some antecedent and the system immediately cries out for the self-active; that is, for activity which is internally self-motived. Thus we may travel up and down the gamut of our finite categories and the result will be in all cases the same.

We shall get a clue to the real situation when it occurs to us to ask whether the dualistic presumption of the agnostic can be maintained. Let us put the question in this form, Have we any grounds for characterizing any experience as purely or merely relative or finite? Is the absolute or infinite completely excluded from any part of our experience? We may answer, of course, that it is always there by implication, and this will be true. But this implication itself, How does it come to be so omnipresent? and, Can it be further defined? Taking the last question first, we may say that this implication is everywhere translatable into a demand for selfhood. It arises always in the experience of some conscious self which is

trying to realize the world, and it arises negatively as a protest of this self against its own incompleteness,—against the limitations which thwart and defeat its aspirations and its powers,—while positively, it arises as a demand for completeness, a demand that there shall be an experience complemental to its own in which these limitations are overcome and its aims completely realized. If what we call the finite and relative self did not find its own experience and its world wholly incommensurate with its own internal demands on the real, there would be no ground for the implications in question. The significance of such a fact is clear enough. If now the threads of necessary implication which lead to the postulate of a world of transcendence and absoluteness be all centered in our selfhood and are expressive of its fundamental demands upon the real, is it not reasonable to conclude that in selfhood we find either the absolute itself or else a typal-form which, when ideally completed, will fill up the measure of the absolute? Now, that no being like you or me actually fills up the measure of the absolute in its experience is a statement that does not need to be argued at this stage of our inquiry. We are so keenly conscious of the limitations and the fragmentariness of our best attainments that so long as we heed the voice of experience we shall not be in danger of mistaking ourselves for the absolute. The other alternative is not only more reasonable, but it fits into the scheme of conclusions which has already been established. We have seen that the whole metaphysical interpretation of the world proceeds from the inner standpoint of self-consciousness, and that it is in the effort of the self to realize the world that the consciousness of the metaphysical implications of its experience arise. Furthermore, we have seen that the only intelligible key to the conception of the nature of this metaphysical realm is supplied in the form and analogies of selfhood. And in this connection we have seen how the effort of the religious consciousness to grasp and realize this realm takes the form of an advancing

dialectic in which, through the analogies of our selfhood-experience, we are forever approximating to, but ever falling short of, a complete and adequate realization of the divine. All this points in the direction of one conclusion, namely, that selfhood supplies the germ of an experience which, if its forms could be completely developed and all its possibilities translated into reality, would have transcended the limits of finitude and relativity and become absolute. Our experience then contains the germ of transcendence in it, and this germ supplies the norm of absoluteness and the point of departure for those analogies which render the idea of an absolute experience intelligible.

All this may be conceded without thereby altering the fact that beings like you and me shall never be able to span the gulf that lies between us and identification with the divine. There can be only one *Eternal Being;* but we are members of a community of beings who are our fellows and whose world we can by no means entirely compass. Our consciousness, while unitary and tending always to reduce the world to a unity, can include only a finite portion of reality while other portions lie outside of us and constitute a world of not-self. Only that can be truly absolute which includes the whole sphere of reality in its consciousness and is related, therefore, with equal directness to every point of reality. The issues of the absolute life are internal and not external, and the forms of its activity must be completely realized self-activity and self-determination. Our experience is related to the absolute, then, as one which in its limits and conditions is finite and relative but which has central in it a category that is potentially absolute. This category is selfhood and we, by virtue of selfhood, become heirs of the infinite, and our ideals when completed are all ideals of an absolute experience. We carry the lines of our own limited selfhood on into infinity and thus realize, in conception at least, the world of metaphysical reality. That the absolute if it exists, is a world of experience and that the notion

of a complete experience includes the distinction between the finite and infinite, relative and absolute, is beyond reasonable dispute.

It follows from the fact that reason itself is the voice of experience, that the method of rationalism, in so far as it asserts any aloofness of reason from experience, must be given up. There can be no other reliable method than that which is experiential in its data and procedure. Metaphysics is nothing more than an interpretation of experience with a view to reaching its full significance. Now, in taking this position we are, in form at least, turning away from Kant and going over to Locke and the position of English empiricism. There is a sense in which this is more than formally true. The mistakes of Locke and his school did not arise from their effort to confine philosophy to experience, but rather from a defective conception of the meaning of experience itself. Had the Lockian school come to its task free from the bias of sensationalism, which is an *a priori* notion of experience, and had it been ready to find and accept whatever in experience might present itself on good authority, it is likely that the work of the Kantian revolution would have been rendered unnecessary. But the Lockian school, in prescribing to experience the limits of sensationalism, excluded reason and had no concept of rationality left except one that stood outside of experience and drew sceptical conclusions. In short, the sceptical reason seemed to be the inevitable product of experientialism, and this led to the Kantian revolution which ought to have taken the form of an effort to restore reason to experience, but which, on account of Kant's own defective notion of experience, led to the placing of reason above experience and the vesting of it with an ultra-experiential authority. It is easy enough to see in the light of the present that such a remedy must prove ineffective and that an ultra-experiential reason must either again become sceptical or become again the organ of an *a priori* dogmatism. Historically, Kant's movement has borne fruit in both di-

rections, while the golden trend of Kantism, the one which has carried on the traditions of the Kantian spirit, has been ever toward the closer incorporation of reason with experience. What is claimed here is that the spiritual aim of Kantism and, in fact, the aspiration of the Lockian movement, cannot be completely realized until such a notion of experience be reached as will make it possible to regard reason as the organ in which experience finds its unitary expression. On this basis it will be found possible to heal the breach which has so long divided the lovers of truth into two hostile camps. It is not to be supposed, however, that in thus frankly grounding philosophy in experience, anything of value has been sacrificed, or that the world has grown less rich than it was before. Even the world of rationalism with its categories of reason will not be lost. But it will be transformed and its categories will become the flexible forms of an experience-content which is ever changing. Nor will the world of the sensational empiricist be altogether lost. It will be only transformed and he will find himself with all his cherished possessions in a world the rich potentialities of which had never entered his dreams.

Let us, then, as the final effort of this chapter, endeavor to represent the way in which experience effects the synthesis of the sensational and the rational in its processes. Plato, under the figure of the prisoner bound in the cave, represents the way in which he conceives the soul to be delivered from the illusions of the world of sense and brought to the realization of the truth. Now Plato's representation is somewhat too fanciful and it is colored by his own disbelief in the senses. We, of course, admit the illusoriness of the senses. No doubt the life of sense is pervaded with illusions and its presentations possess a minimum of reality. Nevertheless, we have harkened to the voice of Aristotle and believe that the senses possess a core of solid epistemological value. Plato represents one side of the process, the cure of illusion, but where he fails and

where Aristotle succeeds, is in detecting a golden thread of reliable truth running through this world of illusion. Without following Aristotle closely, let us mark in our own way the stages of the process.[1] If with the old empiricists we persist in representing consciousness as a passive recipient of sensations or impressions which it, when aroused to activity, seeks to organize into a world, it is not likely that we shall ever be able to reach any fruitful results. There is, however, another point of view which we may characterize in one aspect as dynamic, and in another, as genetic, that promises better things. According to this altered way of looking at things, consciousness is at no stage purely passive but acts and reacts upon the world in accordance with laws of its own nature. Furthermore, consciousness is from the outset a germinal self and has in it the norm of its distinction from the world. Its activity will from the outset, then, take the form of an effort to realize the world, an effort in which it seeks to overcome and assimilate what is called its environment and in connection with which it gradually comes into possession of itself. If, now, we confine ourselves to the epistemological side of the problem, we find that what is called its sensory stage is one in which consciousness takes its first steps both in the realization of the objective world and in the realization of self. On the objective side its efforts lead to the gradual definition of the world under the forms of space and time and the feature of the situation of special import here, is the fact that it is out of this effort that both form and content of knowledge emerge. Consciousness develops its forms in the same way it develops its content. It does not create either, but finds both as factors arising in an undivided experience. Beyond the first sensory stage of representation in space and time, we find the knowing consciousness pushing out

[1] One of the striking features of Aristotle's method is the fact that in his most abstract thinking he never loses contact with experience. This I apprehend is one source of the extraordinary virility of his thought.

into a sphere of further realization through the medium of its dynamic forms, thus achieving the world of forces and activities, while beyond this as a final stage it develops through its aesthetic activity the forms of a unified world of objective experience. Along with this objective process and inseparable from it, arise the progressive stages of self-realization, so that the subject world develops *pari passu* with the objective, and experience as a whole unfolds a representation in which the subject stands central and to which the whole world of objectivity is translated into realized content. Thus we find that knowledge as a whole, becomes a function of experience, and its categories and principles of rational construction arise and develop as intra-experiential and inseparable from the matter which they define and unify.

Now, we have tried to make it clear in the earlier chapters of this discussion that we achieve the true point of view in metaphysics when we restore the knowledge-process to its place as an element in a larger and more concrete activity of experience. We do not need to be told that there is such a thing as will or volition in experience and that the aim of volitional activity is the achievement of good. Nor do we need to be told that there is such a thing as feeling in experience which takes the form of interest and has for its end emotional satisfaction. Nor do we need to be told at this stage of our progress, that this concrete experience-activity supplies to us the true organ of metaphysics, or that the effort to know and realize is motived and determined by the demands of a consciousness which seeks the satisfaction of the whole individual nature. We have seen that it is only when the impulse to realize the world flows from this concrete spring and when the scope of our activity is determined by the requirement, that the whole interest of our being shall find satisfaction in its object, that experience develops an organ of rationality which is adequate to the task we impose upon it when we require it to lead us into the inner court of real-

ity. We do not need to go over again the details of our demonstration that the final rationality which utters the whole requirement of experience is teleological in its spirit and form and that it embodies itself in the activity of purpose. Our metaphysics, then, will be a discipline the aim of which is to interpret the final meaning of experience as a whole in the terms of a purpose in which the whole is intended, and an end in which it is ideally completed. Entering upon his work in this spirit, the metaphysical investigator finds that his first task consists in dealing with different strata of experience which have different degrees of significance. These strata range themselves, as he learns, into a series, and the terms of the metaphysical interpretation are filled out by degrees as he travels up the scale until at last, as we have found, they complete themselves in the sphere of religion.

The process by which this result is obtained is an exploration of experience under the guidance of a principle which has been developed as an organ of experience itself. Now the steps which we propose to take in the remaining chapters of this discussion represent but a further application of the same method. We enter here on the task of a special application of principles to the development of conceptions of nature, God, man and his destiny. But the concrete demand we are seeking to serve is the most vital interest of experience. Man's experience is such that there arises in his world the distinction between himself and what he calls nature, and the distinction between himself and God. How these distinctions arise and how each is to be interpreted in itself and in its relations with the rest, are problems which any philosophy that would be at all complete must take up and answer so far as that may be possible. But in the whole investigation, whatever sea of abstractions we may have to sail through, it must be ever present to our mind that the world we are dealing with is the world of experience in which we men and women live, and that the concrete interest we are seeking to serve is the most vital

and pressing of all the interests to which we mortals respond. The nature with which we shall be concerned in the following chapter is a nature that affects "our business and our bosoms" and the God of whom we shall have something to say in another chapter is that being who in the religious consciousness becomes the most intimate companion of our lives, while the man of our discussion will be just the faulty but aspiring mortal we so well know, a being the very imperfections of whose nature lead him to fix his heart on God and the hope of an immortal life.

CHAPTER II.

NATURE.

THE plain man is likely to regard the notion of nature as an original possession. He cannot remember the time when this solid world which supports or arrests his efforts did not stretch above and beneath him pretty much as it does at present. Anyone who should venture to tell him that there was a time when no vestige of such a world existed to him, would scarcely have his assertion credited. And yet this is the story psychology has been telling us since Locke. Judge of the plain man's state of mind, then, when he begins to be initiated into the Berkeleyan vision of the subjectivity of the external world. His *esse est percipi* will be little more than a cry of amazement at the revelation, and Berkeley's conclusion that the external world is nothing more than a man's idea in his own mind will come to him as the announcement of the eclipse of all reality.[1] To him the solid world of his implicit faith has collapsed and there only remains a sort of subjective dream-image which he carries about with him and which surprises him so often by behaving so very much like the old solid world which has disappeared. Now it is not our purpose here to

[1] There is no intention here to derogate anything from the great value of Berkeley's work. The study of Berkeley makes an epoch in the intellectual history of the individual just as it made an epoch in that of Europe when the works first appeared. But Berkeley represents a starting-point rather than a goal of thinking.

follow up the personal history of the plain man in order to show how his mental balance is gradually restored; for restored it will be and restored the balance has been, since the time of Berkeley. This is only to say that subjective idealism has gone very much out of vogue and that men are beginning to realize how their processes of knowledge may lead them to the apprehension of a stable world of objectivity. The first lesson which the plain man, who has been thus awakened, learns is that the world of his present perception, the sphere which he calls nature, did not always exist to him but is an acquired possession. When his astonishment at this discovery has somewhat subsided and he begins to investigate the new situation, this is what he discovers. The color of the rose seems to him to be a solid possession of the rose, but the physiologist tells him that the color he sees is a reaction of his consciousness on certain movements of his optical nerves, while the optical expert will further inform him that these nerve vibrations are but the transmission within the organism of certain molecular impacts caused by the reaction of light waves upon the tissue of the rose which in its turn is reducible to molecular motion. This result may be generalized till it has been learned that in the field of what Locke calls the secondary qualities of things the consciousness of man may be compared to a 'sensorigraph' registering the impressions that come to it from it knows not where. In his consternation at this result he may, like the drowning man, lay hold of what Locke calls the primary qualities of things, and imagine that here he has found something solid to cling to, but here again the logic of science is merciless and he is forced to admit that his space and time and solidity, come to him, like his other possessions, through the process of the registration of symbols of unknown forces in his own consciousness.

It is no cause for marvel that the plain man should lose his faith in things when he makes this discovery, or that he should become sceptical. In fact, the case is alto-

gether as bad as it appears to him. Only, the way to overcome the difficulties of the situation is not to turn our backs upon it, but rather to press on and make the best of it. Had Bunyan's Christian turned and fled, he never would have discovered that the lions were chained and harmless. The very first step in the right direction is the acceptance of the whole revelation of science. There are the lions and we must make the best of them. The world is, to start with, pretty much as science depicts it. "We are like infants crying in the dark," the poet sings, and in truth it is a dark world which welcomes the infant's first cry. But let the baby take courage. His darkness will begin to vanish and here and there rays of light will break in. The chaos of his first impressions will begin to disappear and germs of order will arise here and there. His void world will begin to give place to order and the spirit "moving on the face of the deep" will start here and there an unfolding germ of intelligible form. Let the plain man become a genetic psychologist and hark back to his infant days; he will not find his world so hopeless. He will learn that his great business while he was a baby and during the years before he emerged into self-conscious boyhood was the building up of a world piece by piece and element by element, and he will find the story of his childhood genius a wonderful one, out-rivalling all the tales of fairy-land. He will find it to be literally true that his whole world and the only world he knows or can infer, has come to him through the little aperture of his own consciousness,—that his whole universe is one which he has, at infinite pains and through a complexity of process which makes his head swim, spelled out in terms of his own conscious symbols. He will learn how, by slow degrees, he has become cognizant of the psychic world of other beings like himself and how his world of space and time has progressively unrolled itself, and how the things of this world have gradually taken form and arrangement and definite and predictable motion. He will learn how, at a certain point, the world of presentation

sent him back to look curiously in the dark background for the causes and conditions of its happenings and how this search opened up a new phase of organization and a new chapter of world-experience. And he will learn with amazement how, in this process of building up a world out of symbolic terms in his own consciousness, he has been gradually building up also a vision of a subject-world which he calls himself. Now, the lesson he has been learning here, and which we moderns have been so slow to acquire, is that there is no other way by which we can come to the realization of any intelligible world but the way of this genetic experience-process. We look in vain, then, for any world outside of experience and any attempt to construct an intelligible sphere outside the limits of possible experience is sure to be guided and informed by experience-analogies. Nor have we completely oriented ourselves in this regard until we have learned to look within experience for the grounds of those distinctions, which we have been accustomed to seek outside of experience in some field of the *a priori*. For when we have learned to look within experience for all our possessions, the revelation soon comes to us that we have not lost the old solid world of our native faith, but that it has simply been transformed. In the new world of experience we recognize an old friend in a new dress, and even the dress itself is not so different, but only shows so in the angle from which we view it. What we mean by this figurative language is that we learn with the plain man that a world, in order to be solidly and stably grounded, does not need to hold itself aloof from experience. Rather, if it did so it would never enter into the field of our cognitions, and we could at best only vaguely suppose its existence. But the experience-process itself leads to that which is solid and stable as well as to that which is unstable and the fashion of which changes. We learn, therefore (and this is almost the last insight that comes to us), that the experience-process does not mean subjective idealism, but rather a sphere of reality which is solidly and

objectively grounded. The *esse* is *percipi*, if we mean simply to describe the epistemological process by which anything is apprehended. But *esse* is not *percipi* if we mean by it that the process yields nothing but its own procession. The process gives us the world of existents, and the thing of cognition is the permanent precipitate of the processes out of which it has emerged. The Berkeleyan has this great lesson to learn, and in learning it he finds his subjective idealism changing into something that may from one point of view be called transformed Lockism, since it is a philosophy of experience and repudiates ultra-experiential terms; while, from another point of view, it may be called transformed Kantism, inasmuch as it finds in experience the distinction which Kant also found and emphasized, and only denies Kant's contention that these distinctions are to be looked for outside of experience.

We are in a position now to begin the discussion of the conception of nature, and the first problem we shall consider is that of its *origin*. We have already learned that we do not have any original knowledge of nature. But nature stands out in such sharp contrast to the sphere of psychic and social experience that it has been an almost universal conviction among men that somehow the cognition of nature antedates that of the social world and that the social world presupposes the cognition of nature as its solid support. The refutation of this view of the matter comes partly from the social psychologists and partly from the epistemological idealists. The social psychologist is able to show experimentally that the first world of the child is a social one; that it is peopled with living beings who respond in a social way, before it becomes peopled with inanimate things which respond in a mechanical way. Now, the epistemological idealist goes beyond the results of the psychologist and professes to show us the precise mode in which our concept of nature is developed out of social soil. He starts out with the proposition that our common knowledge is made up of objectively describable

terms which are accessible to many observers and upon which these many can agree or disagree. This process of objective description and comparison, which we have elsewhere characterized as the equating function of the social consciousness, leads, the epistemological idealist asserts, in the first place to the emergence of the categories, which are simply social equations of the broadest possible generality, and these in turn lead to the organization of the results of our social experience into the different spheres of reality. Some of these socially equated results remain psychic and social in their character, but there is a class of them which tends to become dissociated from the mass of social generalizations and form an organized body which is relatively independent of our ordinary social reactions. This organized body we learn to call *nature* and we give it in our thoughts a standing outside of our social experience, and in the end come to regard it as not only independent, but as the necessary ontological ground of the social experience itself. The epistemological idealist admits these later stages, but is supposed to deny their validity and to take the ground that nature has no ontological significance apart from the social process out of which it has emerged. It is clear that this is the Berkeleyan idealism writ large in social characters, and at a later stage we shall call it up for some criticism. Here we are interested only in the way in which the conception of nature is connected with the experience-process on its social side, and in this we are in agreement with the epistemological idealist. We agree that the cognition of nature arises out of the reactions of social experience, but when we ask further what kind of social experiences these are, we find that we must draw a distinction between reactions which are social on both sides, —that is, the interactions of living agents like ourselves,— and certain reactions which do not fulfill this model, one side of which,—the other than ourselves,—reacts in a way that we learn to call mechanical. And this way which we call mechanical we learn in time to associate with things

that react as though lacking in subjective impulse and intention and as though impelled purely by a motive that is external to them. These, however, are later discoveries which affect only in a dimly apprehended way the earlier experiences. But what we are contending for here is the fact that the conception of nature originates as the notion of a kind of agency that differs from agency in its purely social form. And this difference gradually defines itself along the lines we have indicated. In short, nature is, in the first instance and fundamentally, a dynamic conception. In our social experiences a class of reactions that are mechanical in their form are gradually sloughed off from the social base and tend to form an organism of their own. No doubt this mechanical group, when once it has been segregated, from the social, will appear to be the special world of space and time, but the fact is that space and time are also forms of the social world and it is hard to see how any point of differentiation between the two worlds could possibly arise in connection with these categories. It is possible to abstract space and time from their social content, and then it is found that these categories are open to pure mechanical treatment, but if we were to seek in space and time for the point of differentiation between the social world and nature, we should never find it. The concept of nature is dynamic and the germ of it is reached when we begin to differentiate from the social those forms of agency which seem to act in a way that is fatalistic and determined by external impulse.

Now the organization of the conception of nature is, no doubt, one that passes through devious stages. The first step is, no doubt, the separation of what we call material, inanimate things off into groups by themselves where they constitute our world of brute matter and physical forces. The second, which is doubtless largely contemporaneous, will be the incorporation of the space- and time-categories specially with this non-social, material group. There must be a psychological reason why space and time seem so much

more germane to nature than to any other department of experience; and the reason, no doubt, is that these categories fit so perfectly into a system of mechanical agencies. The mathematician in his calculations, for example, does not think of social space and time. His instinctive reference is to nature. Having incorporated the sphere of mechanical reaction with the space and time media, the world of the plain, unreflecting man becomes and continues to be that vaguely defined sphere of material things and forces which stretches out indefinitely in space and out into the past and future in time. But the notion of nature being dynamic, and space possessing no obvious dynamic quality, the plain man does not trouble himself so much about space. This is true even when he has to travel over it and there is a mountain in the way, for his first interest even here is in the time and effort it is going to cost him. But the time-aspect of nature is a point of direct concern to him. Time is a dynamic category, being the form of his own effort-consciousness, and as a form of the movements of nature it supplies the starting-point for a new step in the development of the concept of nature.

When we stop to reflect, we shall see how defective a concept of nature is that represents it only as a system of agencies acting in the media of space and time. Such a nature might exist and yet be a wholly unintelligible sphere. Two prime requisites of nature as we conceive it are *uniformity* and *stability*. Uniformity is immediately related to time. Nature as a dynamic system takes the form of time and presents its most interesting aspect to us in the time-series of events. Nature is a system in regard to which we learn to entertain certain expectations and the most fundamental of these is that it will not proceed by fits and starts but uniformly and as though it were guided by some definite and fixed programme. In short, our lives having become fitted into the molds of nature and adapted to its ordinary mode of pro-

cedure, we have come to expect that it will not depart violently or radically from the order which it already observes. This is an essential part of the concept of nature, for it is clear that a system of things in regard to which we could not make the assumption of uniformity could not rise to the dignity of a conception of nature. Where, then, there is nature there must be order, and where there is order there will be uniformity. Now, Mr. John Stuart Mill sought to ground our belief in the uniformity of nature in our experience of its uniformity, and there is a sense in which the position is sound, for if there be uniformity in the world at all it will be come upon in our experience, and were it not so come upon it could not be presumed. The fault of Mill did not consist in founding our belief in the uniformity of nature on experience, but rather in not rooting it profoundly enough in experience. This is remedied to some extent in the doctrine of the social origin of the idea of nature, for here it is the most general and, therefore, the most uniform elements that enter, fundamentally, into the constitution of nature. This, however, does not completely meet the difficulty, and there is still room for the contention of Kant that an *a priori* element enters into the constitution of nature. Only, we shall find it incumbent to deny the *a priori* claim as Kant conceives it and seek its equivalent somewhere within the limits of experience. Let us put the question in this way: Do we learn to expect the uniform behavior of nature simply from our experience of its past behavior? or is there some deeper reason for this expectation? The answer of Mill, which affirms the first part of our question, virtually assumes that there is an objective nature to which we have simply to adapt ourselves. But the case is not quite so simple as this. In the beginning there is no nature and we have in a true sense to build up our world. The social theory recognizes this fact and is, so far forth, more satisfactory. But the social theory itself does not quite go to

the bottom of the question. It gives the *modus* of the organization, so to speak, but not the *motive*. We wish to know something more than the way in which nature arises. We want to know why there should be any nature; or, to shape our question more specifically in view of the point at issue, we want to know why there is any necessity that nature should behave uniformly. As a matter of fact, when we view nature from certain standpoints, there is no uniformity but incessant variety. It is scarcely an exaggeration to say that nature never repeats itself. What do we mean by the uniformity of nature in a world of such infinite variation, and what would it matter if there were a little more variety and if the sun's rays should sometimes melt ice and sometimes make it? Or that the earth we walk on should sometimes resist our tread and sometimes yield to it? The answer could not be found in the nature of these changes themselves. That the operation of the sun's ray should be accompanied now with the melting of ice and again with its formation would present itself simply as an additional circumstance in the constant changes which are taking place, and which in themselves would call forth no special remark. The root-motive is to be sought elsewhere, in the relation of these changes to our purposes. The uniformity of nature which we predict is not any monotony of sameness, but rather a mode of procedure that will be consistent with our purposes.

This is a hard saying and the fact that nature seems to be the one sphere of activity which is wholly indifferent to our purposes makes it seem like adamant. But let us consider what the proposition really means. It is safe to say that our knowledge of nature does not extend beyond the limits of our interest in nature and that there is a certain kind of interest which has motived the whole social process through which the cognition of nature has arisen. What is this interest? It is the interest we have in *generalization* which is simply a search for the

common,—for that which maintains itself in a world of changes. This interest is the immediate demand of the fundamental purpose or aim of our own conscious striving; namely, that we should survive and maintain ourselves in the world in which our lot is cast. Fundamentally, we build up the world for our own purposes and what we call nature is the part of it that stands as the solid background of our purposes. The uniformity which we expect and predict of nature is nothing more than its continuing to serve as a fitting background for the fundamental purpose of living. We do not regard the ordinary changes of things or even the convulsions of nature as violations of this uniformity, since the purposes of living can be realized in spite of their occurrence. But were the chemical elements to be constantly changing their properties so that the same compounds would be at one time nutritious and at another poisonous; were the heat of the sun or fire at one time to boil water and at another to harden it into ice; were the alternations of season to occur in a wholly unpredictable manner so that the farmer could not tell whether his crops were to be matured or destroyed, and were there no assurance that wheat should produce wheat and not tares,—were such changes to occur, then the world would be one whose movements were inconsistent with the fundamental aims of life. In short, from the point of view of these fundamental aims, it would be wholly irrational, capricious and evil. The uniformity we predict in nature is simply the congruity of its movements with the fundamental aims of living; it is, in short, a prediction that nature in relation to the fundamental aims of life will be rational, orderly and good.

That we have here struck the root of our confidence in the uniformity of nature, I verily believe, for we see now that this confidence does not rest wholly upon our calculation of the past procedure of nature, but that it is more deeply grounded in the constitution of things and expresses

that deep demand which we make on the world, namely, that it shall be rational and good rather than irrational and evil.[1]

Now this representation is open, we admit, to the objection that it tends to take away the lawful independence of nature by reducing it to a mere pendant of our own purposes. But we are not yet through with the conception of nature. Deeper than our belief in the uniformity of nature is our faith in its *stability*. Uniformity, as we saw, is reducible to congruity with our fundamental life-aims and excludes only the changes that would be inconsistent with these. The postulate of stability is one, however, that goes beyond the limits of this subjective requirement. What do we mean by stability? Let us bear in mind that the notion of nature is dynamic, that it is constituted of a system of agencies or movements, and that the notion of stability will be that of permanence of function or mode of behavior. The postulate of stability involves, then, the elimination of caprice, accident or chance out of the foundations of nature. The stable will then be a nature that has elements of constitution which do not change and which ground activities that maintain themselves even in the midst of changes of form or direction. If we eliminate from the changing that which ceases to exist and is followed by other than itself, then what remains is the stable which is not subject to change. The stable may change its form or direction, but then the form or direction will not be stable. It is clear that stability is possible only where self-identity is maintained, and we might define it as the maintenance of self-identity. But perhaps this may not be very enlightening. Let us go back and ask for the kind of interest that makes the demand for stability.

[1] The trouble with Mill's appeal to experience is that it is not sufficiently profound. He attempts to ground one of our deepest rooted expectations on the relatively superficial process of simple enumeration of instances, whereas its real root is teleological and it voices the demand that the world shall behave in a rational and orderly manner.

It is clear that here the motive is not that of self-preservation or mere survival. Uniformity, in the sense we have conceived, might be possible without stability. At least there is something more than uniformity involved in stability. The interest that demands stability is one that requires the movements of any system to proceed not from a plurality of possibly conflicting centers, but from some one center of co-ordination and unification from which and in relation to which the system shall act as a whole. There can be no stability short of this: which is tantamount to saying that while uniformity involves congruity with the aims of a life-system, stability involves the presence of *system* in nature as an internal possession. In order to be stable, nature must act from a systemic point of view, and as we have seen in other connections the systemic is the centrally initiated and, in the last analysis, the purposive. We say that nature is stable in so far as it behaves as though its activities were self-centered and proceeded from a unifying purpose.

However, we are not about to ascribe purpose to nature. The point at issue here is somewhat different. It was shown that the notion of stability excludes caprice, accident and chance. These proceed from the presence of a plurality of non-coördinated centers of activity in the same medium. Stability involves the suppression of this kind of disorder by the subordination of all the activities to one center of co-ordination and unification. If nature be a system of this type (and clearly the demand is that it shall be), it follows that the point of co-ordination and unity is one that lies beyond and outside of the sphere of the operation of a plurality of finite and possibly conflicting human purposes. To say that nature exists solely as a generalization of the interaction of these finite human purposes is to make an assertion destructive of the real stability of nature. The last court of appeal, or, to speak more correctly, the unifying and co-ordinating initiative which is to ground the stability of nature must come from some center within nature itself. This much we may

regard as settled. When the question is how this inner center shall be taken account of in dealing with nature, different answers may be given. If our interest be that of science exclusively, this inner center may be treated as a largely negligible term, or at least it will not be necessary to take it into direct account except so far as this may be involved in treating nature as a sphere of movements that are indifferent to human interests and purposes. This is, of course, vital to the science of nature, and it involves, by implication at least, the doctrine that nature is self-centered. If, however, our interest be that of the metaphysician, a different answer will be necessary. The stability of nature involves the existence in nature of a unitary center of activity, and it is the business of metaphysics to investigate this implication and to determine its significance for a system of reality. It will be a vital consideration for metaphysics to determine whether or not the existence of this internal center of activity involves its relation to purpose, since if it does, the purpose must transcend the plane of possibly conflicting finite purposes and must be the organ of a consciousness that is in a position to determine the whole of nature from this inner center of activity.

We thus come upon the question of the relation between nature and God. How is nature related to God? Is there any relationship that is open to determination, and if so how is it to be conceived? Is nature a pure mechanism cut off from the influence of conscious purpose; or if not, how is it related to that purpose? Is the purpose transcendent, acting upon it in a co-ordinative, regulative way, or is it internal and is there a sense in which nature itself is purposive? Now it is in dealing with this question of the relation of nature to purpose that we are brought into relation with the great doctrine of naturalism. Here at the outset it will be necessary to define our terms in order to avoid possible misunderstanding. There are several kinds of naturalism. One of these represents simply the demand of science to be allowed to confine itself to natural

and mechanical forces and agents in its explanations, and with this we have no concern here. If, however, we understand by naturalism not a name for scientific method, but rather a theory of the meaning of nature, it may take one of two distinct and very different forms. In the first place, naturalism may ally itself with materialism, in which case it will involve the elimination of mind and purpose from the universe, and consequently from nature. I mean by this that mind and purpose will be regarded not as primary forms of reality or as real causes in any true sense, but simply as phenomena or accompanying effects of forces and agencies that are purely material. Nature thus conceived becomes a system of purely material forces acting in a strictly mechanical way toward the production of results that are not foreseen or predetermined in any other sense than as the necessary out-working of a non-intelligent material system. Now the spirit of the time is so unfriendly to this species of naturalism, working out as it does into pure atheism, and there are so few professed materialists or atheists in the world, that it might seem futile to give it much attention here. The real reason for passing it over here, however, is the fact that the whole view of the world which we have been at pains to unfold in these discussions is directly opposed to this form of naturalism and may be regarded as its criticism if not its refutation. The other form of naturalism is one that repudiates materialism and identifies itself with some sort of living principle which it plants at the heart of nature and represents as the spring of nature's processes and movements. This form of naturalism ordinarily identifies itself with evolution and its ideal of nature may be represented as that of a self-developing system which contains within itself all the conditions and forces of its evolution.[1] It is clear that we

[1] Professor Ernest Haeckel is an enthusiastic naturalist of this type. In his little work entitled *The Philosophy of Science* he develops a species of naturalistic pantheism which might be characterized as Spinozism turned inside out.

have here a much more powerful conception and one that breathes the very spirit of the times.

Now it is not the purpose here to enter on any formal criticism of this theory with a view to its refutation or otherwise, but rather to submit it to a reflection that will bring out certain respects in which we think it requires modification. At the outset let it be said that the standpoint here occupied is that of evolution. We believe that nature is a system which reaches its results through a process of development. And we believe that the conditions of the outcome of any part of the movement will be contained in the stages that precede it. "Why, then, do you longer find fault?" some critic may ask. Well, the motive of it is not a captious spirit but rather a desire to find a theory that will be metaphysically adequate. If we take the conception of nature as a self-developing system, it is open to us to ask whether the form of its movements be teleological or purely mechanical, and if we say teleological, whether these movements proceed blindly or with foresight and intention. Let us take the first part of this issue,—that between the mechanical and the teleological. If we say that the movement is purely mechanical, what are the implications of our statement? The mechanical is inconsistent with the notion of internally-acting agency. It presupposes externally-initiated movement and externally-acting agency. Mechanism must be constantly replenished from some ultra-mechanical spring or it will run down. But this type of naturalism conceives nature to be a self-developing system. Plainly, then, the notion of a mechanical system must be given up and that of teleology or quasi-teleology must be substituted. This will follow unless some middle ground short of teleology be found on which the theory can rest. Now, teleology implies directed movement and directed movement is movement toward a goal. Let us conceive a system, however, that contains the spring of its own movements but supplies no directive agency. Will not nature be possible on this basis as a system of peren-

nially replenished energies which work out their results through their interaction with one another? It is possible to conceive such a system if we could find the notion of the spring itself manageable. We have seen in the course of our investigation in the second part of this treatise, that such a conception as this is the immediate implication of the inorganic stage of world manifestation. Were nature then a mere matter of physics and chemistry, it would seem that we could be perfectly sure of no other metaphysical ground than this spring of non-directive energy. Even then, however, we should find the conception unsatisfactory and lacking in finality and we should be pressed to the further analysis of spontaneity in order to discover in it some clue to the definite trends which we find in nature. The physical investigator usually blinds himself to this issue by assuming as his data, matter and its laws, meaning by the latter certain primary tendencies, not realizing the fact that it is just these primary tendencies which supply the whole problem here. If our spring of spontaneity really acted in a perfectly unintelligible and aimless way there would be no further question. But back of that system of results which arise out of the interactions of the elements, is a sphere where results are predetermined by the original character of the forces that enter into the interplay. The physicist provides for these by his conception of the world as a system of activities the unitary source of which is found in a spring of spontaneous energy. This brings us back to the critique of the notion of spontaneity itself and we find, on analysis, that it accounts for *initiation* but not for *selection* or *direction*. In order, then, to rationalize the world completely we must postulate some hidden nature in this spring which, to some extent at least, predetermines the course of its movements.

Now we are strengthened in the conclusion arrived at here by the vision that meets us when we contemplate the *organic* world. We have there the manifestation of open selection and end-seeking and in a form that

the action of the environment cannot altogether explain. For if we deduct from the total result everything that may be ascribed to the interplay between the life organ and the forces to which it reacts, we shall find a residue of selective and directive character which we can do naught else than ascribe to the qualities of the original cells which constitute the units of living tissue. The biological philosopher, like the physicist, is likely to blind himself at this point by the supposition that this reference to the original character of the life-cell is really explanatory, whereas in fact it is only a careful statement of the problem itself. What is the metaphysical interpretation of the fact that the world openly manifests selective and directive energy? Is it not that this has been at the world's heart from the beginning and here for the first time reveals itself openly? Plainly, if we include in our conception of nature the sphere of life-activity as well as that of the non-living (and the world would else be a mere torso), we shall have on our hands a nature that yields us not only mechanical results produced by movements that are explicable in terms of the interactions of blind and insensate forces, but also movements which take on the form of selectiveness and end-seeking and are, therefore, openly teleological.

The conclusion to be drawn here is that nature cannot be denied a teleological character. This character is stamped on the form of the life-movements, and the metaphysical issue regarding it is whether the whole is simply an accidental outcome of blind and insensate forces, or whether, on the contrary, it is meant by the very heart of the world. If we take the former alternative, the whole living sphere loses its reality and becomes a mere pendant, a mere epi-phenomenon, of the inorganic and the world in its passage from the non-living to the living and up to the sphere of consciousness and its higher manifestations, is only travelling further and deeper into the valley of illusion. It is becoming less and less real and

at length threatens to vanish into the baseless fabric of a vision. This is not an argument, however, but rather a monition that here we have come upon that fundamental line of cleavage which divides reason from its opposite. It is possible that the world may be irrational and absurd at its heart and that the process by which it realizes itself in outward manifestation may be one of progressive illusion. But such a world is one in which neither science nor philosophy could live. The other alternative then, which locates meaning at the heart of the world, is, broadly conceived, the alternative of reason *versus* unreason. For, nature is either a system of results that have their *rationale* in the inner source of all its activities, or else it has no *rationale* and its results are the accidental outcome of blind and fatalistic forces. There is, in the last analysis, no middle ground and the issue is one between rationality and its opposite.

It would seem, then, that the representation of nature as a self-developing system that contains within it a spring of initiative to which we apply the name spontaneity, however well it may serve the purposes of science (and there is no disposition to quibble on this point), is unable to satisfy the requirements of sound metaphysical theory. Nature is either something less than that and different in constitution; or it is something more and we must go on from the notion of mere spontaneous initiative to more adequate conceptions. Now the theme of this section is nature and God and if we identify God with the metaphysical ground or first principle of the world, it is open to us here to consider what may be the relation of nature to God. We have found that the very concept of nature involves its relation to a spring of spontaneous energy. And we have seen that, when metaphysically interpreted, this spring of spontaneity becomes identical with God. What, then, is the relation of nature to God? Is God related to nature as its soul, and are we to conceive the divine in nature under the analogy of a world-soul? We cannot speak dogmatically,

since our acquaintance with the situation is not rich enough in first-hand knowledge. But we are sure of this, that just as the world of our striving is related to our energies primarily through the purposes which stimulate and direct them, so proceeding in the light of this analogy to interpret implications which arise necessarily out of the nature of the case we are led to relate nature directly to the purposive agency of the divine energy which it involves and to say that nature exists and moves on to the completion of its processes in accordance with, and as the working out of, a purpose in which it is as a whole included. In the light of this conclusion we are able to see how that which, in its outer form, and also from the point of view of its inner spontaneous initiative, may be truly regarded as mechanical, will, when referred to the deeper divine purpose, become intentional and teleological. This much we can determine, leaving the question whether God's relation to nature shall be construed under the analogy of a world-soul to be determined by the conclusion we shall be led to ultimately as to God's relation to the whole sphere of reality.

From nature and God the passage is natural to the theme of nature and evolution. We ask here, How does the doctrine of evolution affect the conception of nature? and as a corollary to this, How does it affect our conception of the relation of nature to God? That the modern doctrine of evolution has profoundly influenced our conceptions of nature no one can deny. It is to evolution mainly that we are indebted for the completion of the notion of nature as a self-developing system containing the spring of initiative within itself. The doctrine of evolution defines this conception by reading it into the time-series and developing the conditions and stages of a progressive emergence of things into complexity and definite form. We may say that evolution is simply the notion of the self-developing system carried out in detail and exhibited in the progressive stages by which the infinite complexity

of the world is realized. Taking it in its vastness, evolution gives us the vision of the cosmos evolving itself into inorganic and organic forms and passing through the open door of consciousness into the field of higher phenomena; while taking it in its details, it initiates us into the laboratory in which the specializng forces of nature are incessantly fabricating its forms. The revelation as a whole is that of a mighty agent which exercises infinite patience and consumes aeons of time in attaining its results, while on the other hand it does not tire of infinite detail but considers the minutest changes or modifications as not beneath its notice. Nature as it proceeds under the rubrics of evolution presents itself as a worker of inexhaustible patience and a mistress of infinite detail.

But while thus magnifying nature's function from one point of view, evolution tends to minimize it from another. In its immediate bearings at least, evolution is a breaker up of unities and a resolver into details. It is not hospitable to the notion of a general relation of nature to its results, especially if this relation tends to be construed as teleological. Even less hospitable is it to the notion of special creations,—special interferences of teleological motives in the chain of mechanical agencies. Evolution leads its votary everywhere to seek for the natural causes of any change of form or movement, in the immediate conditions which constitute its antecedent, and in this it seems to be, and rightfully is, from this point of view, a great destroyer of teleologies. If the question be put, however, whether evolution is to be regarded as hostile to the notion of teleology, the issue raised leads to an important distinction. Evolution as we have been regarding it, is a mechanical principle, and as such is hostile to any teleology of the interfering species. I mean by this a teleology which is conceived as acting on the same plane with the mechanical forces and as injecting itself in such a way as to modify the operation of the mechanical forces. There is, however, a

kind of teleology with which mechanism has no quarrel,—a teleology that does not work on the same plane with the mechanical forces, but grounds and conditions them. Thus, if we speak of the mechanism of the world, we mean the plexus of agencies which operate in the time-series to the immediate production of outer movements or results. If, however, the world have an inner as well as an outer meaning, and if we relate the outer movements of the world to an inner spring of initiative, we have seen how, metaphysically, we are led to translate this inner into terms of selectiveness and purpose. The purpose thus becomes the grounding and unifying principle of the outer mechanical forces and movements. Now, against this kind of teleology evolution has nothing to say, for it leaves the field open to the unrestricted play of natural causes and mechanical agencies while at the same time it holds the whole, and in it each and every detail, in the clutches of a teleological principle. In truth, if we view the world from the plane here indicated we find that evolution itself presents the form of teleology. It is formally an end-realizing process and there is no other *rationale* in the process from the beginning than the end toward which it is moving. The doctrine of evolution does transform our conception of nature and it does eliminate a great many kinds of teleologies, but it does not shake the relation of God to the world when that relation is rationally conceived; rather, it commends itself as the most rational conception of God's way of realizing his purposes.

The question of nature and man resolves itself substantially into that of man's relation to the process of natural evolution. We do not here propose to deal with the question piecemeal or to adopt the makeshift of attempting to propitiate the monster we call evolution by offering him man's body on condition that he execute a quit-claim in respect to man's mind. It is not difficult at this day for the biologist to show that the physical organism of man has been subject to the evolution-process. And the genetic psychologist supplies almost equally ample evi-

dence that man's mind is not a fixed quantity, but has experienced a growth under conditions that are largely ascertainable. There is a sense in which it has become necessary to adopt a fluent conception of man both as respects his body and his mind. Leaving questions of detail then, what can we say of the relation of man as a whole, that is, as an organism including both body and mind, to the process of natural evolution? In order to answer intelligently we must return to the discussion of the last paragraph in which it was concluded that evolution itself is not absolute and self-determined, but that as a process it involves implications which, when developed, bind it fast to purpose and make it divinely determined. The question we have to ask here is, How are we to conceive the relation of man to the process of evolution when thus conditioned by the divine purpose? Let us consider it first, however, in relation to a natural process conceived apart from the divine purpose, and as self-determined. The theory that man is a pure product of such a process takes its place as a phase of that naturalism which we have been examining. Let us suppose man to be resolvable into a developing series in time and that each member of the chain arises out of antecedents also included in the series. Here the problem becomes a special form of the general question as to whether evolution can be regarded as absolute and self-determined. Now we saw in dealing with the general question that this cannot be the case but that evolution involves an internal spring of initiative, and that this, when submitted to analysis, does not prove to be an ultimate conception but involves some internal principle of selectiveness and intention which leads to the grounding of evolution in purpose. The question regarding man involves a special form of this implication. Man as an organized body informed with mind or consciousness is a being in whom the selectiveness and end-seeking characteristics of life have taken on a higher form. They have become explicit, or are on the way to become so, and supply

an example of a consciously determined organism, and since all consciousness is teleological, as James has taught us, we have in man an example of an organism the form of whose activity is consciously teleological. The question is, how could this form of consciously determined activity arise out of conditions purely mechanical and determined by natural causation? Or to give the full advantage to naturalism, how could action that is consciously selective and end-seeking arise out of a spring of initiative that is lacking in these qualities? Of course, it may be said that these are potentially in the spring, but Aristotle has taught us that potency is not an ultimate term but presupposes actuality, so that a world which evolves conscious selectiveness and end-seeking in its manifestation must be consciously selective and end-determining at its heart. This is the invincible logic by which naturalism in general is proved to be inadequate, and its force is not abated when the naturalistic claim is made respecting man. Let it be admitted that man is a product of evolution. This evolution itself when called into court can assert no divine prerogative, but is forced to admit that in order to be rational at all it must be grounded in the divine purpose.

This brings us back to the main question: the relation we are to conceive as existing between man and a divinely determined process of evolution. Is there any metaphysical reason why we should not adopt in full the evolution standpoint regarding man's relation to nature? There is none so long as we conceive evolution itself as requiring grounding in divine purpose. The hesitancy we feel is rather religious than metaphysical. What about our bibles? And then there is the miracle. What are you going to do with that in a world where everything is gradually evolved? Well, so far as our bibles are concerned the vital point about them is not how they were made but what they contain. If evolution be divinely conditioned, then God can give a revelation of himself

through its channels and this revelation may be summed up in a history and a book. In the last analysis the only guarantee of the truth is the truth itself, and if there be a true revelation of God in our bibles we may be sure that they will not perish or lose their commanding power over the hearts of men. As to the miracle, in any case where it is real it is either intended in the divine purpose or it is not. If not, then it has no religious significance. If, however, it be intended in the divine purpose, it then has a place in the divine world-scheme which evolution itself is working out. How could a genuine miracle contradict evolution unless we conceive evolution as being absolute? It is not evolution but the form of naturalism we have been criticising, that is inconsistent with any genuine divine happenings. If our world be metaphysically grounded in a divine purpose, then our bibles and our miracles so far as they are genuine will take care of themselves and our religious scruples may be laid to rest. It will never be conceivable that any form of divine manifestation can be inconsistent with a world-process that is divinely grounded.

CHAPTER III.

IDEA OF GOD.

In the discussion of the *Ultra-Social World of Religion* in the second part, we pointed out in some detail the way in which the recognition of a being, whom we call the transcendent Other, is involved in the religious consciousness from the outset and how the history of religion is but a record of the evolution of that being into clearer and more conscious terms. The argument of those chapters we shall not repeat here, but shall go on to consider the idea of God briefly as to its origin and development. But our main concern here will be rather with the metaphysical significance of the idea of God and with the relation of God to nature and to the life of man. The question of the origin of the idea of God may be either a genetic one of evolution and history or it may be the more logical problem of the grounds in experience out of which the idea of God normally and in fact necessarily arises. We have already dealt with the genetic and historic problems and the latter supplies the form in which the question will be considered here. Again, taking this form of the question, it may be considered in its general bearings in view of the whole of experience or in special connection with the religious consciousness. We propose here to treat the problem first in its general and secondly in its more special bearings. How, then, is the idea of God related to the general experience of man? Are there any data outside of the religious

consciousness that lead up to the conception of God? Bear in mind we do not say that any such data will be adequate to the full development of that idea. We only ask whether general experience looks in the direction of this idea, or, on the contrary, away from it. That it looks in the direction of it will be admitted by any one, we think, who does not cut experience off from its metaphysical implications. Taking experience in general, either in its objective or its subjective aspects, we shall find that a point is certain to be reached where a distinction arises between the finite and relative, and an implied infinite and absolute, in which it is completed and grounded. We have seen that man only requires to follow out his objective processes far enough in order to arrive at a point where his finite powers reach the end of their initiative and lapse into subordination to some agency that transcends and comprehends them. This is the lesson of the whole second part of our investigation. Starting with the nearest data of experience, we have seen that following the course of the sciences down to their most fundamental concepts we find in these, implications which connect them with some metaphysical ground. And the investigation of this metaphysical ground resolves it into a teleological principle which roots the world in intelligence and purpose. Entering the field of consciousness and passing out into the world of social activities, we find that the metaphysical implication becomes clearer and that we are approaching nearer to the notion of a being analogous to the self we know, only transcending our finite molds, in the thought and purpose of which the world finds its rational ground. It makes no difference what region in experience we set out from, it will lead up to the point where we become conscious of its metaphysical implication. Now it is because our experience is of this character,—an experience that nowhere allows us to stop and say with the storied Indian "*Alabama, here I rest,*"—that we find it everywhere relating itself to some principle of metaphysical grounding.

We call this demand for metaphysical grounding a datum for the formation of the idea of God because it everywhere leads toward a spiritualistic conception of the world. In cosmology we find data for relating the world to intelligence and purpose, while in metaphysical-psychology we discover further data which lead us to the reference of this intelligence and purpose to a being analogous to self. Without special regard to the religious consciousness, then, it can be shown that the general trend of our experience is toward the formation of an idea of a being in whose thought and purpose the world is grounded. But we have already learned that it is only in the religious consciousness that we become directly aware of the presence, in the field of our activities and related to ourselves, of a being who is not only our other and not ourself, but a being who transcends us and to whom we ascribe ultra-human attributes. That this consciousness is crude at first we admit, but in its crudest and most undeveloped form it contains the germ of the distinction on which every form of religious experience rests. It is in the religious consciousness that the idea to which all experience approximates becomes clearly the idea of God. It may safely be said, then, that the idea of God is a distinctive product of the religious consciousness, and we may go so far even as to claim that normally the religious consciousness develops its idea of God without special or conscious reference to the metaphysical trend of general experience. Hence it is that we find the idea of God which develops in the religions of the world, to a great degree independent of the idea as it develops in philosophy. This independence would be more complete in the earlier stages of its history, while in the later stages the tendency of religion to become reflective would lead to the coalescence of the two movements and the attempt to unify them in one conception. In dealing with theism, for example, we find it necessary to distinguish between the conception of God that has grown up exclusively in religion, and what we

may call philosophical theism whose problem is that of the identification of the absolute or world-ground of philosophy with the God of the religious consciousness.

While, then, the idea of God may originate and grow up, in a sense, as an independent possession of the religious consciousness, it is safe to say that it loses that isolation just as soon as any general movement of reflection arises among men. When reflection arises philosophy is born, and philosophy looks not only to the grounding of things but to their unification. Just so soon as a thinker, like Anaxagoras, arises and propounds the theory of intelligence or reason as the first principle of the world, the conditions of the correlation will be present. And the end will be worked towards from both sides. For on the one hand religion itself will become speculative and it will be seen that the God of religion must also, in order to maintain his place, be identified with the ground of the world. He must be that absolute first principle to whose thought and purpose the whole world is to be referred. The idea of God in religion will thus tend to become more philosophical. On the other hand, philosophical reflection, in its efforts to reach an intelligible conception of the first principle which it postulates, will be likely to find a norm of such conception in the religious idea of God. In spite of its hatred of anthropomorphism, which is constitutional, it will not fail to see that at the heart of the religious conception there is a very profound use of the analogy of selfhood. Taking the hint, philosophical reflection will develop a critical conception and use of this analogy and will find a rational employment for it in the reduction of its own first principle to a more definite conception. The absolute will now no longer be a mere principle of thought and purpose; it will begin to assume the lineaments of a being, a self however vaguely conceived, which becomes the bearer and organ of that intelligence and purpose in which the world is grounded. There will thus be an approach to a

common ideal until, at the point where religion becomes truly philosophical and philosophy truly religious, they will coalesce into one. This is only to say that in a consciousness whose organs of reflection and religion have coalesced into one, a conception of God will be born which will tend to satisfy the requirements of both philosophy and religion.

The idea of God which thus emerges is one that will have back of it the motives of both general and special experience. For philosophy is the organ of the general experience and formulates its demand in the reflective conception of God; whereas the special organ which we call the religious consciousness develops the religious idea of God. When the two organs coalesce into one this may well be said to voice the whole of experience, and when this demand leads to the formation of an idea of God that promises to satisfy the requirements of both philosophy and religion, it may well be claimed that it represents a necessary requirement of the whole of our experience. We put a question of even greater moment when we ask for the metaphysical meaning of the idea of God. The technical question of existence does not come into this discussion, but the vital issues are those of essential nature and reality. Now the question of essential nature is one that involves both the type and fundamental attributes of the being we call God. The most fundamental question of all is, of course, that of the type of being after which or upon which the idea of God is to be formed. This type is one that involves two elements; (1) an intelligible norm, and (2) what we may designate as the application to it of a principle of transcendence. The intelligible norm of all being in its inner constitution is found in our own experience of selfhood. Unconsciously we use the analogy of selfhood in forming the conception even of inanimate things. If these things are regarded as individuals in any sense, we conceive them, as such, to have some inner center of being or activity to which all

their plurality of motions and parts is related. And we do not regard this simply as a necessity of conception; it is rather a necessity of being, inasmuch as without it what is plural in its movements could not possibly be one in any real sense. But our experience does not supply us with any other model of such being than the one we find in our own self-consciousness. We may ask, then, What would our world be to us were the unconscious application to it of the analogues of our own selfhood eliminated from it? The truth is, there would be no world left; there would be only an unorganized mass of happenings into which we should have no means of introducing even the germs of order. The analogy of selfhood is the principle of intelligibility in general, therefore, in our relations with the world, and it is that in a special sense in the determination of our idea of God. The application here is more conscious, more explicit and more complete.

Let us consider, then, what this analogy supplies to the idea of God, that could be derived from no other source. Well, to be brief, it supplies the whole framework of the idea. It alone makes it possible to conceive God as another self; a being of self-centered conscious activity; a being holding in its consciousness the elements of thought, feeling and will; a being that manifests itself in forms of personality, the category that mediates the manifold expression of a unitary nature; a being that acts upon and realizes its world through the medium of purpose; a being that conceives its ends, loves its ends and works toward them in its volitions and objective activities. All this is involved in the use of the self-analogy. We find it operating in a blind, naïve and altogether rudimentary way in the mind of the savage who worships his fetich, while in the higher forms of religious experience it is more developed. In the highest and most rational religions the use of the analogy has become still more explicit and at the same time more critical and discriminating. But in every effort of the human con-

sciousness to define in conceivable terms the nature of that being to which it stands related, the self-analogy stands central. By the use of the self-analogy we determine our idea of God as that of a self, a being possessing selfhood fundamentally like our own and exercising attributes that have their analogues in our experience. God stands, therefore, in an important sense as the ideal of our other self. Now, if there were nothing in our experience that naturally tended to qualify or check the use of the self-analogy, our idea of God would become that of a being on our own plane and altogether like ourselves. Our religion would thus become rank anthropomorphism. But our analysis of the religious consciousness has led us to see that the idea of God is qualified from the outset by the attribute of transcendence. The being whom the religious consciousness reveals to us is one that occupies a higher plane of being than we ourselves. And as our religious conceptions develop, this sense of transcendence unfolds into terms of rational apprehension and God becomes to us the absolute and infinite self which stands over against us as our religious other. The specific revelation of transcendence which comes to us in the religious consciousness finds confirmation in general experience, for we have already seen how every part of our experience leads to a point where the implication of transcendence arises, and we have also seen how the philosophical idea of God arises from the coalescence of the special data of the religious consciousness with that of general experience. The experience of transcendence, and especially the conceptions of absoluteness and infiniteness which develop out of it, act in a very profound way to modify the whole application of the self-analogy. And the application of this modifier is not exactly of the kind the plain man would imagine. We do not regard God as a being like ourselves up to a certain point and so far forth intelligible, while beyond that point his nature becomes transcendent and wholly inaccessible. This is a mechanical way of conceiving that

represents a characteristic weakness of our time. It is altogether irrelevant and futile. If God be intelligible at all he is intelligible in his whole nature and not simply in a part of it. Again, if God be transcendent and beyond our conception, he is so in his whole nature and not in certain peaks which rise beyond our vision. The relation is one of blending of different aspects. God is a being like ourselves in a true sense,—our other self. He is this in his whole being and not in a mere part of it. There is no mode or attribute of his nature which, from the point of view of this analogy, does not become intelligible and in view of which God does not become our fellow.

But we must not forget at any and every stage of this way of conceiving, that there is another point of view and another way of conceiving which must blend with and modify our conceptions of fellowship. That is the point of view of transcendence from which arises the necessity of regarding God as a being who in relation to our finitude and relativity is infinite and absolute. The idea of the infiniteness and absoluteness of God can arise only from the application of the principle of transcendence. The use of self-analogy is to be qualified, then, at every step by the application of this principle. But how, we may ask, is the application of this principle to be effected? Well, we may take the following as an illustration. Employing the analogy of selfhood we regard God as a being of the self-type; that is, one that is modelled after the plan of our own selfhood. But in conceiving God as a self we must apply the principle of transcendence to our conception and regard him as an absolute and infinite self,—as a self, in short, that is not limited in its scope by the agency of other selves outside of it on its own plane, or by worlds that lie outside of the content of its own consciousness. The divine self must be an *all-including self*. Again, we must regard the divine self as one that is not limited or restricted in its agency or that at some part is forced like the

finite selves to become passive. God, to use the Aristotelian concept, must be regarded as *purus actus*, and this implies that the divine activity is one of wholly free and unrestricted agency. Moreover, by the use of the self-analogy we represent God as personal in the sense that his nature expresses itself in forms of manifestation corresponding to the divine thought, the divine feeling and the divine will. But in ascribing personality to God we must not forget that it is a personality touched with transcendence. The thought of God will be an all-comprehending thought, his love will give itself a free and all-including expression and his volition will have a scope that will not be affected by the hampering bonds of finite effort. Again, in the employment of the self-analogy we represent God's agency as purposive in its character. But we must not forget to apply the principle of transcendence and to conceive the divine purpose as one that comprehends and realizes all finite purposes. There is a sense, it is true, in which God may transcend our thoughts in ways we cannot imagine. We have no immediate intuition of the divine nature and it may, for aught we know, contain continents of being of which we can have no conception at all. But this, if it be true, and we see no reason for denying it, lies outside of the sphere of vital interest. God, so far as he is real to us at all, is a being conceived after the analogies of our own selfhood but touched with the principle of transcendence.

When we propose the question of God's *reality*, we are, in fact, asking in what sense God is necessary to a system of experience. The question is more complex than appears on the surface. There is a sense in which God does not exist, since he does not appear in the field of phenomena. We arrive nowhere in experience at a presentation of the divine being. If we define existence as phenomenal presence, it cannot be said that God exists. If, however, we employ the term existence in a broader and deeper sense as meaning that which is in any true sense real, then the

question of God's existence becomes one with that of his reality. It is only in the latter sense that the problem of existence will be involved in this discussion. Now when we ask how God is to be regarded as real, we are asking in what sense he is necessary to experience. We have already seen that the postulate of such a being is necessary and that the evolution of our idea of him is one of the profoundest functions of our experience. But the question of reality is something different from all that. We are not seeking here the ontological grounds of the genesis and development of the divine idea. Rather, our question here is one of value, and what we are really asking is, What interest of experience does the divine idea satisfy, and are there value-demands on the satisfaction of which its validity depends? Clearly we are here in very deep water and not far from the vital heart of the whole question of religion. To enter the field by successive steps, let us state as our first proposition, what should probably come last in any well-ordered discussion, that the idea of God may claim reality in so far as it satisfies the demand for a metaphysical grounding of the world. If as theists we can show that the most rational solution of the world-problem is to be found in the idea of a divine being, we have vindicated so far forth the reality of that conception. Now, altogether apart from the distinctively aesthetic elements which enter into the situation, the general metaphysical investigation leads, as we have tried to show, to the postulate of an intelligent being acting under the categories of thought and purpose, as supplying the most satisfactory answer to the demand for a metaphysical grounding of the world. We have found, in the first place, that only a principle of intelligence can begin to meet the requirement of world-grounding; and when we postulate intelligence we have let in the camel's head and the force of the logic of the situation drives us on until we have habilitated intelligence in the conscious thought and purpose of a being that is conceived after the type of our own self-analogy. Taking our departure from any point within

experience, we have found that this result is inevitable. The implication of it here is that the idea of God fulfills a necessary requirement of our experience and that it bears this fundamental test of reality. That which is real in experience will be either actual or necessary. We cannot say directly that God is actual, for experience supplies us no data for a representation, but we can say that God is necessary, inasmuch as the whole of our experience embodies the satisfaction of its metaphysical demands in the idea of God.

But the idea, in order to be completely real, must be able to satisfy other and more aesthetic requirements. Man shapes the idea of God not merely to satisfy the requirements of metaphysical theory, but to fill out and ideally meet the requirements of his own practical life. It is this side of the requirement that is most prominent in the religious consciousness. The religious demand is not so much for the true as it is for the good and this good is not a mere utilitarian good, but rather a rich ideal of life which includes both completeness and satisfaction. The emotional element in religion will always be its most prominent feature because what it certainly aims at is not simply a good but an ideally complete good,—one, therefore, in which the emotional nature will find its fullest satisfaction. Let us suppose, then, that the idea of God, in addition to meeting the requirements of metaphysical theory, is able also to satisfy ideally the demand in experience for the good; that it meets this demand in a way that fulfills the aesthetic requirements of the emotional nature, and that God becomes not only the ideal of goodness but also the ideal of beauty. It will certainly contribute greatly to the reality of the conception when we are able to say that the practical value of the divine idea is as great as we have shown its theoretic value to be. That the idea of God is able to satisfy these demands is in need of little demonstration. It is true that the divine idea, like any other ideal, has been developed gradually and that in its earlier

stages it has not been free from imperfect and even vicious elements. But this is inevitable in case of an ideal. As man develops in intelligence and moral purity his ideals develop also, but if they have in them the stuff of which true ideals are made they will not only survive the process but will themselves be the guiding stars of progress. This is conspicuously true of the idea of God. Not the worst but the best possession of a people will be their idea of God. This will be the fountain head of their highest spiritual life and aspiration, and in the minds of the most gifted members of the race it will become the ideal of new spiritual advance and enlightenment. The divine idea will always stand in front of progress, therefore, as the ideal of complete good, and the standard of that which when realized will yield complete emotional satisfaction. This being true, we need not fear that religion will ever lose its hold on the heart of the race.

Another test of the reality of the divine idea is its ability to meet those requirements which spring out of the imperfection, the need and the sinfulness of our nature. The idea of God might be metaphysically satisfactory and it might even stand as the complete ideal of good, both for the will and the emotions, without thereby coming into very close relations with our lives. It might stand simply as an unapproachable standard that had little power to affect the vital issues of our lives. Man as he is conscious of himself is an imperfect being who has to struggle sometimes unsuccessfully with temptations and sins. The evils of his existence sometimes threaten to overcome him and he is often forced to sit and weep over shattered hopes and ideals. How can God be real to such a being? Not simply as the unapproachable ideal of what he would strive for if he were able, but rather as the idea of a being who may come into intimate relations with the struggling soul in the midst of its imperfections and the pollutions of its sinfulness and help it to overcome and become pure. It is the idea of a God of compassion and helpfulness that appeals

directly to our human experience, the idea of a being who not only shines afar off in the cold glories of a star in the firmament, but one who comes into intimate fellowship with man; one who touches and stimulates and purifies him with the fire of the divine love; one whose touch has purification and healing in it and whose presence is a spring of undying hope as well as a fountain of unfailing strength. In short, it is *when the idea of God coalesces with that of the Christ* that it achieves the highest claim to reality. We do not need to show at this stage how the divine idea works out in the sphere of living manifestations as the Christ-idea. That all religions have the germ of the Christ-idea in them may be shown, and that in the higher religions this germ develops into the religious prophets and messiahs of the race, and that in the highest spiritual revelation of the religious consciousness of the race the Christ-idea becomes the symbol for the manifestation of God to the soul of man in the most direct personal and helpful form; all this goes to show how inevitable the Christ-idea is when once the human consciousness has come to a sense of the divine presence in the world. Now, it is in its coalescence with the Christ-idea that the idea of God acquires its highest claim to reality. I do not mean to say that the idea of God involves the Christ-idea by any species of logical necessity. It is not the claim of logical deduction we are following here. A man may become a theist and may stop there, either because of intellectual difficulties in the way of further progress or because he feels no special emotional need of the Christ. The logic we are following here is that of experience; and what is maintained is that in a normal experience the *nexus* between the idea of God and the Christ-idea is obvious and that the motive which leads to the translation of the idea of God into that of the Christ is one that springs from the imperfections of our human experience. The most real conception of God is that of the Divine Helper of men in their struggle to overcome the imperfection and evils of their lot and to realize perfection of life.

Lastly, it will be clear that the reality of the idea of God will be measured by its ability to harmonize with, and in a true sense to unify, all the other real interests and ideals of life. We are in a bad predicament when our culture points east, our science north, and our religion south. To one the elements of whose experience are in such chaos as this, the idea of God cannot, in the nature of the case, have much significance. But let us suppose that our culture and our science are at one in the line of truth and that our practical ideals all center in the line of good. If, then, our idea of God be that of a being in whose experience the true and the good are unified so that there can be no conflict, our religion then becomes the principle which unifies all the elements of our life and the idea of God becomes the central force in our experience. Now it is clear that the normal function of such an idea as that of God is one of unification. God stands as the ideally complete realization of all we may aspire to. He is simply the soul writ, not in large, but in transcendent terms, and the idea of him is one that ideally comprehends and completes all the elements of our experience. Naturally, then, the idea of God ought to bear to our experience and all its elements the relation of a unifying principle. The reality of the idea of God depends, therefore, on the degree to which it vitally relates itself to our experience. Were it a mere abstraction without any close connection with the life of man it could lay little claim to reality. But that has the highest claim to reality which not only touches experience vitally at every point, but is also necessary to it as its ideal and its unifying principle.

Another problem which arises here is that of the relation of the idea of God to the world. This is, of course, a broad question, and we can only touch on its most vital bearings. But much elaboration will not be necessary, inasmuch as most of our positions have already been argued in other places. We have seen in treating of the relation of nature to God how the latter is a necessary presupposi-

tion of the former and how nature must be conceived as grounded in the divine thought and purpose. Here we approach this same relation from the other side. How does the idea of God relate itself to the world; that is, to the sphere of finite manifestation and productivity? If we take the world as a phenomenon or as a system of phenomenal existence, it is clear that the idea of God will stand related to it as its author; as the source of its existence and the ground of its dependence. In its cosmological aspect, the idea of God is that of a self-existent being which contains in itself the initiative of phenomenal activity. We have seen, however, that the notion of a mere fountain of spontaneity is not sufficient, and that the world must be grounded in prevision and purpose. The idea of God must be conceived, then, as relating itself to the world in terms of thought and purpose. In terms of thought, since it is not only impossible to conceive the world as originating by accident or chance, or in any other way than through the prevision of a thinking principle, but it is also impossible, taking the world as a present, existent fact, to conceive how it could exist in any sort of unity except as related to a thought which comprehends all its details. We do not need to thresh out this issue at this point, for it must be clear by this time that, in the last analysis, no other principle can organize the many into one or go out from the one to the many, than one of thought or conception. The divine thought relates God to the world, then, as the being in whose conception the world is first instituted as an idea before it becomes constituted as a fact. The thought of God is therefore the intellectual *prius* of the world. But thought, as we have seen, does not become a realizing activity until it becomes informed with selective interest and volition. When so informed it becomes purpose, and purpose may here be defined as the thought of being made selective by interest or feeling, and passing, through volition, into being as reality. *Purpose*, then, is the concrete and synthetic category which expresses the relation of

God to that initial process in which the world is first launched into existence. The divine thought conceives the world and this world-concept through selective interest and effective will becomes real. The very first relation of God to the world arises thus through his omniscience. He is the *All-Knower* and the world stands defined in his thought. But while this is logically true, it is nevertheless impossible to conceive thought as acting without interest. The divine feeling must somehow be implicit from the outset as a selective motive. Furthermore, a feeling-informed thought; that is, a thought accompanied with love, cannot be conceived as acting apart from volition. The interest-motive in the thought will constitute the spring of a will-impulse in which the object of the thought is realized. The divine thought in which the world is conceived must then be represented in its concreteness as holding in it the selective interest of feeling and the impulse to realize. If, when we say that the world is realized in the divine thought, we mean this perfectly concrete thought, then we say practically the same thing as when we affirm that it is realized in the divine purpose, for the notion of purpose involves the same elements.

It is needful, however, to connect the idea of God not only with the existence of the world, but also with its *productivity*. We mean by productivity those energies or processes by means of which it is maintained and developed. Now it is clear that the idea of maintenance connects God with the substance, the being of the world, while that of development relates him to its movements and changes. That the world should maintain itself is, in truth, as unthinkable as that it should constitute or develop itself. For if the world originates in a thought-informed purpose, its maintenance will be nothing more nor less than persistence in that purpose. The divine purpose is stable and, therefore, the world persists in being. The divine purpose is stable and, therefore, the world moves forward in a uniform way. The divine purpose is stable

and, therefore, the forces and energies of the world persist and are conserved. Were the purpose that there should be a world to relax for a moment; were the God of the world to go visiting like old Baal, how could it be otherwise than that the world would collapse and the universe fall into nothingless? Creation and maintenance, as the old theologians saw, are practically one and the same. The problem of God's relation to the development of the world has already been treated in one aspect of it in the section on *nature and evolution* in the preceding chapter. We there concluded that the notion of evolution is not final and that the process of evolution must be rooted in the divine purpose. This we reiterate here and go on to another aspect of the relation. If God is related to the energies and processes of the world as their grounding principle, it follows that he is dynamically related. We are not arguing the point of unity here. It has been sufficiently shown that the plural elements of the world can be unified only by relating them to the one divine purpose. Let us ask, however, how this unifying function is to be realized. It is clear that the divine purpose will unify the energies of the world not merely by comprehending them in a thought, but by actually *initiating* them. Let us ask, then, what this initiative involves. Take, for example, the notion of natural causation, which is that of action deriving its impulse from another. This form of conditioned activity is not final, but has a presupposition; that of activity arising from an inner impulse, *i. e.*, self-impelled activity. If now, following this analogy, we trace the relative energies or powers of the world back to a point where the necessary implication of the self-initiative arises, and relate them all to a common spring of absolute energy, we shall have solved as far as human thought can solve the problem we are dealing with here. It is not open to us to cut the powers of the world off from the absolute by regarding them as purely relative, and then to refer them to the divine purpose for their grounding. The relative must

always involve its connection with the absolute, and it can do so only by containing in itself the implication of a more ultimate form of being. This is true of the powers of the world; a relative form of energy must involve absolute energy, and it can only so involve the absolute by pointing to the absolute as the spring from which it emerges. The divine purpose will then be dynamically related to the world and there will be a true sense in which it can be said that God stands related to the world as its first cause.

We pass, then, to the last theme of this chapter, the question of the relation of the idea of God to man. The topics here will be (1) God's relation to man's origin, (2) his relation to man's being and activity. Naturalism accounts for man's origin by making him a pure product of the forces of nature. But we have seen that, however completely we may regard man as implicated in nature, yet nature itself cannot be conceived as a purely self-developing system, but must be referred, in the last analysis, to the divine purpose. If, then, nature is grounded in the divine purpose, man, however clearly he may be bound up with nature, must trace his origin and his reason for being to the divine purpose. The position of naturalism is turned, then, and can no longer be regarded as an impediment to the metaphysical doctrine of man. How, then, are we to conceive the connection of God with man's origin? Of course, it would be possible here to divide the question and to consider the problem of man's physical nature apart from that of his mental and spiritual constitution. We prefer, however, to deal with the problem in view of the concrete nature of man. Let us consider man, then, in the concrete,—man as a living organism with self-conscious and spiritual possibilities,—as approximately and phenomenally a product of natural evolution. This will justify the biologist in referring the parts of his physical constitution to the processes of organic growth and development. It will justify the physiological psychologist in connecting the growth of consciousness with the develop-

ment of the nervous system and, in a sense, treating thought as a function of the brain. It will justify the genetic psychologist in resolving the mind of the adult into a developing series the natural causes and conditions of which may be determined, and it will justify the anthropologist in connecting man's development both bodily and mental with the general forces of nature and humanity. If our doctrine of nature be true, however, these natural explanations, or any other that can be given, will not cut man off from a divine origin. We do not say that man is a product of nature and nevertheless of divine origin. We say rather, man is a product of nature, part and parcel of nature, and by virtue of that fact, of divine origin. Let us once become thoroughly grounded in the doctrine of the divine origin of nature and we shall not have any trouble with the natural extraction of man. We do not need to lift man above nature in order to connect him with his divine father. Through nature he comes from God. How, then, are we to conceive God's relation to man's origin? In the first place, we must find the first term of the relation in the divine thought and purpose. There is no other ultimate reason for our existence than that we are the objects of God's thought and purpose. If God did not in the first place think of you and me we should never be thought of at all. If God did not choose us and propose our existence we should never come into being at all. If God did not constitute us in the realizing activity of his will we should never become real at all. Just as nature traces its initiative to the divine spring, so we trace our special initiative to the divine thought and purpose. Conceived in the divine thought and brought forth in the divine volition, we are in truth the sons of God. After what has already been said we do not need to argue that man as a son of God may be a product of nature inasmuch as nature herself is God's handmaid.

The question of God's relation to the being and activity of man is one that involves profound issues. How can God

be related to man as his author without in fact deifying man himself? If in the act of constituting man God is simply positing himself, does not man himself become either a mere appearance or wholly divine? We cannot take the ground that creation is to be represented as the divine positing itself. Let us recall the method by which the finite consciousness is able to reach an intelligible conception of God. It is by the employment of the self-analogy. In his experience of his own selfhood man realizes the type of being which he applies to the divine nature. God is another self and that renders him intelligible and makes it possible for us finites to come into intelligent communion with him although all our conceptions of his nature must be qualified by the principle of transcendence. Now it is by a kind of reversal of this analogy that we shall be helped to an intelligible conception of God's relation to man's nature. In his own divine self-consciousness, no doubt, God finds the type of being by which his objective thought will be guided in its act of conceiving objective existence. All the individuals in the world will, no doubt, be determined in their nature after this type. God's creative thought will, therefore, be *generically* one, but *specifically* and *individually many*. But it will be in the thought of man, of a self-conscious being whose activities proceed under the categories of thought and purpose, that the self-type of the divine will find its most complete objective embodiment. When we say, then, that God conceives man in his thought and realizes him in his volition, we mean that here his thought and volition are embodying themselves in beings of his own type. We are justified then in saying that the creative activity of the divine will be constitutive of beings after his own type and, therefore, containing in them the potentiality of selfhood. But if we go further and say that God simply repeats himself in his acts of creation, we say what cannot be true and what is disproved by our own finite experience; whereas, if we essay to conceive the *modus* of the divine energy

in constituting finite and relative beings we are attempting what is beyond our powers. The finite consciousness finds in its approaches to the divine that there is ever a point which baffles its conceptions and forbids a clear intuition of the divine nature. In like manner when we attempt to represent to ourselves how the divine may initiate beings and activities which are finite and relative, we find ourselves estopped by the same difficulty transposed. If we could reach a clear intuition of the divine nature, then it would no doubt be possible to represent the mode of the connection of the divine with the human. The difficulty is how to overcome the obstacle involved in the x term which symbolizes the vanishment of the difference between our approximating conception and its transcendent object. Here we meet the x term in the downward way from the divine to the human, and although there are ample rational grounds for the general doctrine we are here advocating, it is not capable of clear and decisive demonstration.

In his relation to man's being, then, we are justified in saying that God constitutes him after the fundamental type of his own nature. It is this type which determines him as a self-conscious being such as we know him to be, and it is this type which constitutes him a real son of God and enables him to call God his father. The question of God's relation to man's activity is one that involves similar issues. If man is not the unmodified projection of God, so to speak, into the phenomenal world, then his activities cannot be regarded as mere continuations of the divine activity. In a subsequent chapter it will appear how this fact enables us to ground a sphere of freedom and responsible activity for man. The question here is different and concerns specially God's relation to the sphere of human agency. If we waive the difficulty as to the constitution of the finite human agent, we have remaining the question: given the finite agent and its activities, How are the divine being and agency related to these? In the first place it will follow, if man be not a mere continuation of the

divine, that he has a real individuality and that his selfhood has at its heart that unsharable core of conscious being which may not be immediately determined even by the divine itself. Instead of saying simply that the divine will respects the human to the extent of preserving its freedom, we go further here and translate the fact into a necessity of the situation. The inner core of selfhood is something that the divine cannot but respect. We say it reverently; God might be conceived as annihilating a soul by withdrawing from it his sustaining thought and purpose, but it is inconceivable that he should thus sustain it and at the same time rifle the citadel of its being. If, now, we concede this inner citadel to man, it will follow that he is a being capable of conceiving and pursuing real purposes, and that the problem of the relation of God to human activity resolves itself into the question of the relation of the divine purpose to the purposes of man.[1] Here we come upon somewhat familiar ground. We have argued in another place that God's relation to the evil purpose is not in its inception which may be an act of rebellion against his will, but rather in its execution, that is, in the system of objective activities by which the purpose realizes itself. It is in this objective sphere that the same activities which further the evil purpose may also, as parts of a larger system of activities, contribute to the realization of the divine purpose. We have simply to generalize this principle in order to reach the solution of the general problem. Just as we have seen that the divine purpose is related to and works out in a system of world activities, so our human purposes realize themselves through the movements of the

[1] It is a characteristic weakness of Monistic Idealism in most of its current forms that its principle must be strained in order to maintain the reality of the finite individual. It is not enough to be able to say that God means me in his purpose and therefore I am, unless at the same time I can assume that in purposing me he has constituted me a real being. It does not satisfy the claim of reality to say that I am a finite mode or a specialized mode of the divine purpose.

objective world. We have to set some part of the system of natural forces in motion in order to realize our purposes. But the whole world of activity is the objective manifestation of the divine, the field in which God is realizing his purposes. It follows, then, that the outer movements of our purposes entwine about and become part of this divine system of agencies. This is the encouragement of the good man. For he wishes above all that God's purpose should be realized and he regards his own purpose as tributary to the divine. He can be assured, then, that though his finite purpose be set aside, yet the efforts he is putting forth will nevertheless serve that divine good which he has most at heart. But the evil man, in so far as he is only evil, can take no comfort, for though his evil purpose succeed within the narrow limits of his own life, yet he has the assurance that his triumph is temporary and that in the wider system of events his purpose is sure to come to naught.

CHAPTER IV.

NATURE OF MAN.

THE naturalistic theory of man is one that not only regards him as a natural product, but also as a product of perishable nature, for it fails to find in the nature of man that spring of permanence which we found it necessary to locate in nature. It follows, then, that man cannot establish his claim to being more than a phenomenon in the world, and, as such, a mere passing mode of being. There is much in experience, both individual and racial, that falls in with such a doctrine as this and lends color to it. If we compare the life of the race with that of nature, nothing seems more transient or insignificant. The social organism and the historic order of the world are in the highest degree unstable, they pass away as a tale that is told and the geological record which so immeasurably antedated them moves on issuing volume after volume of its story long ages after the world has become unfit for the habitation of man. If we take the record of the individual we find it even more fragile and momentary. Compared with your life or mine, the social organism and the historic order of the world are permanence itself. We execute a few movements more or less abortive, and lo! in a night we have dropped from our place in the world of change and that which knew us once knows us no more forever. And by reason of this brevity and instability of our existence we are doomed to see our ideals shattered and every great and

dignified work which we may enter upon arrested before it has properly begun. Naturalism seems to voice man's despair of life in view of its futility,—his contempt for himself as a being that is the mere sport of circumstance.

This representation may be set over against the fact that man in his best efforts, in his aspirations and ideals, seems to be a builder for eternity. Look at the works he executes, the cities he builds, the polities he establishes, the social orders he organizes, the civilizations he weaves out of his own heart, the literature he invents, the institutions and cultures he builds up. Man is by instinct a creator and a builder. His foot no sooner touches the God-made earth, his habitation, than he begins to dream of untold revolutions and new worlds. Man is ever building a tabernacle for himself that shall be permanent and that shall be the embodiment of his ideals. And look at these ideals themselves. Is there anything within the limits of the richest possibility of which man has not dreamed and to which he has not aspired? What regions have the poets, the philosophers, the conquerors, the artists, the musicians, the prophets and the Christs of the race left unexplored? And into what crevice of unexplored mysteries has not man's insatiable curiosity led him to pry? Now, all this is wrapped up potentially in the infant who is the superlative dreamer of dreams. It is found in solution in the experience of the plain man whose plodding life is troubled with undefined longings and with a vague sense of the riches of a life the meaning of which is largely hidden from his eyes. And it comes to its highest and completest expression in man's moral and religious experience, where the ideals he feels himself constrained to follow are amenable to no time limit but write themselves in the characters of the eternal. Man, particularly as the subject of a religious experience, finds himself in direct fellowship with the Ancient of Days, and every genuine religious aspiration of his nature lays hold of the foundations of eternal being.

In view of the disconcerting contradiction which thus

arises between what man aims at in his life and what seems to be the utter worthlessness and instability of his existence, the question of the real nature of man becomes one of the most vital concern. Have the modern researches into the mysteries of life discovered any clues that will enable us to suggest any rational solution to the apparent riddle? The answer we shall attempt to this question will embrace three distinct representations, (1) what we learn from science regarding man's nature, (2) what we learn from a consideration of experience, and (3) what result a metaphysical interpretation leads us to. The scientific story of man is largely one of modern psychology shading off, of course, into biology, and may be summarized from the various points of view from which the psychologist approaches his task. Now, if we say that psychology is the investigation of the phenomena of man's conscious life, it has been discovered that there are several points of view from which an investigator may proceed. He may assume the introspective rôle and may essay to explore consciousness directly and without reference to its material conditions, with a view to determining the nature and laws of its characteristic modes of activity. He may decline the task of pure introspection and may seek to determine the laws of mental activity by studying its correlations with the nervous system and stating his results in terms of this correlation. He thus becomes a physiological psychologist. Or, he may take a still more objective attitude and may essay to study the activities of consciousness in connection with the movements in the external world with which they are correlated. He thus becomes an experimental psychologist.

Now these different points of view pertain to the psychology of the individual. But there are several ultra-individual standpoints which the psychologicist may occupy. He may correlate the mental life of man with that of animals and thus reach the results of comparative psychology. He may study the phenomena of groups of

conscious individuals and thus enter the domain of social psychology. He may investigate the mental characteristics of national movements and thus develop what is called folk-psychology; or he may study his problem historically after the manner of the genetic psychologist. The mere enumeration of standpoints is bewildering, and it may well be asked what hope of rational results is there in this babel of voices, each speaking its own dialect and not infrequently contradicting its neighbor. Well, it is not our purpose to attempt the reconciliation of discordant voices, though it could be shown that much of the inconsistency is more apparent than real. There is, however, one thread of continuity running through this whole field of investigation which it is our aim here to bring to light. The old psychology, which confined itself largely to introspection and to the consciousness of the single individual, was led by this standpoint to regard man too much as an isolated and, therefore, an independent individual. It was this isolation of the individual that gave rise to the most characteristic fault of the eighteenth century,—a tendency to magnify the power and independence of the individual in relation to his environment. The individual was regarded too much as the maker and unmaker of civilizations, governments and religions. He was clothed with altogether fictitious prerogatives and dignities. The eighteenth century individual enjoyed a species of unlicensed freedom, therefore, that was checked and sobered by no commensurate sense of responsibility. Now, the tendency in the opposite direction, which not only took away this unchartered freedom, but threatened the extinction of every semblance of individual prerogative, came in with the rise of the modern historic spirit and method which is usually accredited to Herder, and especially with the birth of the modern doctrine of evolution. The whole trend of these movements is toward the correlation of man with his environment in such a way as to exhibit his life and action as largely a phenomenon of a larger race- or life-

movement. Moreover, the new psychology whose various standpoints we have pointed out above, has arisen in response to these modern tendencies and its whole drift has been toward the incorporation of the activity and history of the individual consciousness more and more completely with the larger movements and history of the race, and, in fact, with the life-series as a whole. Let us see how the correlation of the different points of view will make this clear. When the psychologist passed from the study of the isolated consciousness to that of brain or nerve-accompaniments, the idea of a correlation of the mental and physical began to stand out prominently and the conviction arose that to treat the mental apart from its nerve-concomitants would be dealing with an abstraction. This conviction was strengthened when the problem was still further objectified and the correlations of mental activity with the corresponding movements in the outer world were made an object of study. The conception of man as a part of a broader nature and the tendency to generalize consciousness and to regard it as the subjective or inner side of all physical phenomena, began to dominate in philosophy.

Up to this point the progress has been made through successive standpoints for the investigation of the individual consciousness or organism. But now psychology achieves the comparative standpoint and begins to investigate the correlation of human and animal life with the result that the life of man and that of the lower animals appear to be all of one type and the individual consciousness seems to fade more and more into an illusion. The social psychologist steps in at this juncture and shows that a man has not undisputed possession of the privacy of his own inner life. Those inner activities by which he comes to realize himself constitute a sort of undivided estate in which his neighbor is a sharer with himself. Man, the individual, is also a *socius* and, as such, is in relations of fundamental interaction with all the social units of the class to which he belongs and the society of which he is a

part. Not only so, but his individuality coalesces with that of the other group-members in such a way as to give rise to a system of general reactions which on one side supply the basis of communal organization and action, while on the other they gradually build up the sphere of nature, a realm of relative indifference to the interests and aims of man. The individual's dream of independence thus experiences a rude awakening and he is forced by the social revelation to regard his consciousness as a cog in the wheel that grinds out social phenomena.

The story, however, is not yet complete; the most important chapter of all, perhaps, is that of genetic psychology which, on the one hand, tells the tale of evolution and points out the processes which incorporate the life of man with the life of the world, while, on the other hand, it gives us the vision of the genesis of our adult possessions in the play-activities of the child. We are able to follow the accession of elements stage by stage from a beginning where consciousness can exist only in germ. We may comfort ourselves in view of this disillusionment with the reflection that everything must be present in germ in the lump of immaturity we call the infant; and this is true in a very important sense; for, were the course of development not largely predetermined by the original elements that enter into the infant's constitution, we could not be assured that he would develop into a man. But even here we come upon very decided limits, for nothing can be more certain than that the infant has not even the germ of a conscience or of a sense of duty or of the distinction between right and wrong. Nothing can be more certain than that the infant is lacking in even the rudiments of a religious consciousness. Of course we say that the potentiality of these is in the infant while it is not in the young animal, and this is true, but the word is largely a cover for ignorance. We do not like to contemplate the mystery of the origination of anything, and so, to escape from its presence, we hide our eyes behind the mantle of potency. Dropping

figure, the great fact which the study of genetic psychology reveals to us is not only the development into maturity of the powers with which the child starts, but also, and more important still, the way in which it comes into possession of powers which it did not possess even in germ at the beginning of the race. It shows us how the child's mental, social and religious nature is gradually constituted out of elements, many of which come to it from its environment.

The conception of man which the investigations of psychology in all its branches tend to develop may be stated somewhat as follows: "No man liveth to himself, neither any man dieth to himself." The individual is not a simple abstract consciousness or mind somehow encased for momentary purposes in a body, but he is a bodily organization informed with consciousness, whose activity is, therefore, at the same time physical and mental. Man as such a concrete organism is not in any sense independent of the physical world that surrounds him or of the system of living things to which he belongs. His auditory apparatus is a species of sounding board which responds to the sound-waves of the universe just as his bodily organism as a whole responds to stimulations from every quarter. The life of the conscious individual is thus part and parcel of the life of the world. In his relations to the system of things with which he is surrounded he is interwoven biologically with the whole web of life, so that he can say truly, "Nothing that lives is alien to me." In truth the living currents of the organic world flow through his veins. And when we take into consideration his social relations his individuality is again apparently lost in the network of the social life of humanity. Nowhere can he find solid footing in his world for any kind of individual independence; and when to that we add the revelation of genetic psychology, the whole solid world seems to turn into quick-sands beneath his feet. Nor does the general representation of psychology experience any mitigation, in this respect, from the results of investigations in the

broader field of anthropology. The vision of anthropology seems to be that of man, his ideas and institutions, as the product of a vast complex of general forces and conditions. Man is a creature of his environment, the victim of the climatic and other conditions surrounding him; his faculties grow up in the course of his struggle for existence, and both his intellectual and moral qualities are obtained, like the cunning of the fox, through his persistent efforts to trap or evade his enemies. The economist makes his contribution to the tale by pointing out how the individual is caught and whirled around in the mechanism of industrial production and competition, while the student of history and politics points to the fact that men are largely the product of institutions and that the institutions of the present are historic outgrowths of past conditions.

We do not say that this story of the reduction of the individual to the position of a phenomenon of universal forces is the only revelation of modern science, but it is certainly its most important and most impressive. There is, it is true, another side which will form the starting-point of the second division of this discusson. Introspective psychology, in its voyages through the realm of conscious activity, finds itself in a world where the relations are not simple but where every bit of consciousness seems to be "owned," as Professor James puts it, and this ownership, when we come to construe it, resolves itself into a common relation or reference of all the parts to some common center. This center in turn resolves itself into some conscious court or tribunal which seems to put forth the claim of ownership and in connection with which there grows up the more or less vague apprehension of a central self standing as the unifying subject of all the states of consciousness. In this introspective effort the investigator is exploring what he calls his own consciousness, and he means by this, a consciousness that belongs to himself as an epistemological subject. He knows that as the subject of experience his conscious self stands central and that no

element can enter the precincts of experience in any other way than as part of a conscious content of which he is the subject and unifying center. This leads introspective psychology to assert a central place for self in its conscious world, although it does not undertake full responsibility for the determination of this self. In fact, without denying the reality of the self, it may regard it as negligible and may undertake the task of building up a psychology without a soul. We do not call this procedure in question here. What concerns our inquiry is the fact that the vision of the central self thus arrived at is never lost but is present by implication, even in the most objective investigation of psychic phenomena. The notion of self may not play any direct part at all in the psychologist's work; nay, he may deliberately push it into the background. But it will remain true that any phenomenon in order to be regarded as psychic and not purely physical, will take on some reference to consciousness and will be so far self-owned. Now the point we wish to put the accent on here is that *the vision of the introspective psychologist is restored to its central place by the insight of the genetic psychologist.* Genetic psychology, while it in a sense completes the story of the individual's subjection to his environment, is yet just as emphatic in its insistence that there must be an individual there and that the whole business of the genetic process is the evolution of selfhood. Deprive the genetic investigator of his category of the central self and he simply loses himself in a mass of unrelated phenomena. The great burden of the psycho-genetic story is how the self of the child comes into possession of all the elements of its experience and how the adult self develops out of the self of the child. When it comes to the adult, the vitalest part of its tale arises in connection with the development of the individual self into the *socius,*—the self that is the subject and bearer of social reactions. Now it is this deeper revelation of science regarding the nature of man, that we lay hold of here as the point of departure for a

further study of the nature of man from the standpoint of his general experience.

In his general experience man asserts himself in his work as an individual, and the problems we consider here are problems, therefore, of individuality and include, (1) the question of the nature of what we call our individuality, (2) its evolution in experience, and (3) the grounds of its maintenance. The term individual is used of things outside the sphere of conscious existence; we call a tree an individual. But the whole meaning of the term is derived from our experience of our own individuality. In what sense, then, do we find ourselves individuals? We are not concerned here with the origin of individuality but rather with the fact. Man is an individual, or, rather, realizes himself as an individual, in his experience of himself as a self-conscious and self-active agent in his world. That self-consciousness in the light of which his life is self-centered and by virtue of which his conscious activities become organic and relate themselves to a common center, is doubtless the fundamental fact of individuality, determining its form and type. Now, it may be that when we look into our own consciousness we do not find such individuality very clearly defined. We are prepared to believe that there are some grounds for the complaint of Hume that he can never catch *himself* on the point of any of his observations. We might ask, of course, whether it is reasonable to expect to catch the self on the point of any observation, inasmuch as our selfhood, if it be real, is not a phenomenon among others, but something that comprehends them all. Perhaps if the Humian would look, as a subject knower, into his own attitude, toward his experience he would be more successful in finding the object of his quest. At all events, the self-centered unity of self-consciousness is not to be found by exploring among the happenings of consciousness, but rather by considering the attitude of the active subject that is putting the questions, toward the content of its consciousness as a whole.

Viewed from this standpoint the fundamental form of individuality is no longer doubtful. If man looks in the right field and in the right way he will have no doubtful revelation of the unitary character of his consciousness or of the selfhood which constitutes its central principle of organization. Now, we call a being capable of thus relating its activities to a common center, an individual. When we call a tree or a plant an individual we are reading into it, by means of our own experience-analogies, a form of being like our own. We are representing it as involving some organizing principle by virtue of which all the parts and phenomena of the tree-life become organically related. It is true that we sometimes call inorganic bodies individuals, but this only happens when there is something in the form of their activities that suggests the analogy of an organism.

Our individuality means more, however, than merely this ground-form of its existence. It has content as well as form, and it is the content that is ordinarily most obtrusive in our experience. When we speak of content, we refer to the quality of the activity which takes on this selfhood form. Falling back on that analysis which has brought to light the threefold complexity of our nature and the fact that every form which consciousness as a whole may assume involves a synthesis of intellectual, emotional and volitional elements and that the activity is regarded as an exercise of thought, feeling or will, accordingly as one or other of these elements becomes dominant and explicit; what we wish to emphasize here is the fact that man's individuality asserts itself in that agency which he exercises in his efforts to overcome and realize the world. His individuality expresses itself in his agency, and therefore manifests itself in all his interests and forms of activity. There is an important sense in which individuality is the same in all men. My individuality and yours have a common form; as individuals we are the same kind of beings. Our activities express

themselves in the common forms of thought, volition and feeling and the internal quality of these is such that one man has as a rule no difficulty in becoming *en rapport* with the personal experience of another. But this common aspect of individuality is allowed in common usage to fall into the background, and when in popular language we speak of a man's individuality we have special reference, as a rule, to that which is *unique* in his manifestation; to that which differentiates him from other men and constitutes his own exclusive possession. And this one-sided use of the term does bring out clearly one element of meaning that is vital to true individuality.

We have spoken in another connection of that inner citadel of selfhood which every man enjoys in unsharable seclusion, and into which his dearest friend cannot intrude. This is but the metaphysical aspect of that uniqueness which reveals itself in the manifested lives of men. There is enough of the unique in the outer life of the most commonplace of men to differentiate him from all other men. The individuality of Brown may not stand out in any striking contrast to that of Smith or Thompson. Nevertheless, it will not be found in all respects identical with theirs. The well-known principle that no two things in the world are exactly alike holds true in the realm of individuality. The distinction of individuals maintains itself by the uniqueness of each individual, its possession of that which is not sharable with others. This uniqueness is not altogether, or chiefly, a thing of outer manifestation. Its most characteristic expression is an inner one springing directly out of a man's feeling that at the center of his being rests an unsharable core of ejective individuality. This feeling of the uniqueness of his own selfhood gives rise to experiences which, like that of the seer in the Apocalypse, are unutterable. They are real to him, perhaps the most real and precious of all his possessions, and that in which his inmost spirit finds its most satisfying expression, and yet these experiences will be so unique as to wholly defy language or

any of the common molds of expression. They are a wine too precious for any of the bottles of communication. Though we may be sure, in fact, that our neighbor or bosom friend has his own unique experiences, incommunicable like our own, this may be a bond of closer fellowship tween us. The uniqueness of individuality is, therefore, essential to it as its commonalty, and a concept that would be adequate must include both features. The individuality of men is, on the one hand, that mold or type of being which constitutes them of a kind and renders them the bearers of a common experience, while on the other hand, it is the barrier that separates them; the wall of partition that shuts off one man's inner life from that of another; the veil that conceals the "Holy of Holies" in each man's life from the profane gaze of his fellows.

We must carry this vision of the double nature of individuality with us in our effort to trace the evolution of the individual in experience. Royce puts emphasis everywhere on the now well-known distinction between the two worlds of description and appreciation. The former is the world of common describable possessions, while the latter is the world of the unique which each man feels and values but which he cannot make common with his neighbor. Now, while in general it seems to me that these distinctions in a sense overlap and much of the content of appreciation may also enter into the world of common describable things, yet there is a sense in which they have a special value for our present topic. Man possesses a double-sided individuality, by virtue of which he both enters into the common life of humanity and also maintains his own unique life untouched by the life of others. From the point of view of his common sharable nature, man is a *socius* and the bearer of social relations and functions. By virtue of his social nature the life of the individual enters into and becomes part of the life of humanity. At the same time, however, and in the vitalest connection with this social feature of his experience, man

is able to maintain the unsharable sanctity of his own inner ejective selfhood. He is and continues to develop into a unique individual with experiences that are his own inner possession and that he scrupulously withholds from common circulation. And the striking feature about the situation is the fact that it is here in this field of the unique we are to look for the original spring and criterion of that which possesses worth or value. I do not believe that all our worth-judgments, or judgments of appreciation, are unique; the distinction here again is relative, and the worth-judgment has an important place in our world of common, describable things, but it seems to be obvious that the original worth-judgment arises in the field of the unique and that the ultimate criterion of all values will be what it is worth, in the last analysis, to you or to me in the inner court of our own feelings. There are, of course, values that are social and common, and these are apt to occupy the whole foreground in our calculation. But after all a social value is one that has been agreed on by individuals as a *common* good, whereas, if we insist on analyzing the notion of common good we find that it is a good which is sharable by a number of individuals and that its worth is resolvable, ultimately, into terms of what each of these individuals thinks of it. In other words, the notion of good is resolvable into individual estimates. The same is true of the notion of worth or value itself. The judgment of common or social value is resolvable into estimates of individual value. If the object in question be socially valuable, then it will be worth something to John and Peter and Phillip and the rest, and if it has no value for the individuals of the group it is clear that it will have no value for the group. We say, then, that the individual estimate is the last court of appeal in determining values, and that the question of worth is settled, in the last analysis, by the individual before the inner tribunal of his unique and unsharable selfhood. It is marvelous that the features of the sharable and

common should be so intimately bound up with that which is unsharable and unique, but it is evidently true and it supplies another striking illustration of the central and commanding place which the individual holds in a system whose mechanism so often seems to fill the whole foreground and leave no real office for individuality.

Coming back, then, to our main task, which is that of tracing the evolution of man's individuality through the stages of a growing experience, it may be said with truth that the whole of experience is a process in which man comes into possession of himself and the world. If we approach the process on its epistemological side we have the vision of a conscious organism, to which in the initial stages of its effort neither self nor world has become real. The whole vision of knowledge is but a possibility of the future. Through its sense-organs and the stress of the internal clamor of wants and interests which seek satisfaction, it wreaks itself upon the unrealized realm of its environment and the play of its activities leads to the definition of the objective in the forms of space and time. Its world of presentation,—its space and time world,—thus appears as the theatre of its first struggles toward realization. But the vision of the space- and time-world does not satisfy it. The movements of things arouse questions as to what moves them and the awakened consciousness puts the everlasting questions, How? and Why? These lead to a looking behind the presentation for the agency that brings it about. In this, man is guided dimly by the analogy of his own conscious activity, and just as the cat looks for the object behind the mirror, so he thinks to seize the cause by looking behind the phenomenon. This brings to pass another great and epochal step in the effort of world-realization, and the struggling consciousness enters into and develops the sphere of dynamic relations,—the world of cause, substance and interaction. We are here following the outlines of the vision without troubling with the details. Now, the dynamic revelation answers our questions up to a point,

but as yet our world has not been completely realized. The forces at work in the dynamic sphere constitute a plurality and we are pressed to know in what way our world is to become one world of experience. The demand for unity, as we have seen, springs largely from aesthetic roots and is deeply grounded in the self-consciousness of man. It could not be that a unitary consciousness like man's would rest satisfied with a fragmentary world, and its protest against such a world would take mainly the aesthetic form; that is, it would arise as an immediate reaction of conscious individuality in its wholeness against that which contradicts and is hostile to it. The last step in the evolution would thus be the reduction of the objective world to a unitary system congruous with the demand of our own individuality, in which all the parts and processes of the world would become subordinated to a co-ordinating and unifying principle at its heart.

This objective process is accompanied; nay, it involves as an inseparable aspect, the development of consciousness on the subject side of man's gradual realization of his own selfhood. There is doubtless the germ of self-reference in the most rudimentary stages of consciousness, for it is impossible to conceive any consciousness as existing at all without having in it the tendency to develop into a consciousness of self. This being the case the infant will have some form of largely unrealized selfhood, perhaps a mere vague feeling-sense of its existence, but with the beginnings of its objective experiences this sense will begin to develop. In connection with the first representations of its objective world in space and time it will doubtless begin to realize itself as living a conscious life in time, although the clear apprehension of self has not yet arisen. Later on, in connection with its dynamic experiences, its sense of its own agency in the world will be awakened and it will come to a more or less clear apprehension of itself as a practical agent in its own world. No doubt, if we may use Kant's phraseology, it is the practical ego that emerges,

first with clear consciousness under the pressure of the practical struggles of life, while the theoretic ego, the consciousness of selfhood as a unitary principle of life, is a later accession. But the full flower of the realization of self will not come until the aesthetic demand for the objective unity of the world has reacted upon the subject and the return wave brings the individual subject of experience to a full consciousness of the unity of its own life. The final stage in this process of individual realization is not that of a unitary self standing over against the world. This would involve a final dualism of experience. It is rather the consciousness of a being who has realized the world and reduced it to content of his own consciousness. The world in this last stage coalesces with the individual as content of its objective consciousness and the realm of its objective life. The form of individuality has been completely realized in the world which now takes its place as an included part of individual experience. Now, it is only necessary to develop this representation somewhat on the side of man's ethical and religious experience in order to complete the sketch of the evolution of his individuality. Morally, he becomes conscious of ideals that elevate the plane of his life and make him the bearer of duties and rights which lay the foundation, not only for an important transformation of the life which he lives in common with others, but which also lead, in the realm of his unique unsharable life, to the realization of higher aims and higher worth for the individual. Beyond this the religious consciousness brings man into a world where his finite self stands related to a transcendent being who is at the same time his other self, and his religious experience thus correlates and, in a sense, incorporates his life with that of the infinite.

This brings us to the last topic of the present section, that of the *maintenance* of man's individuality in the world. The general problem will involve two questions

regarding, (1) the form of the process by which the individual maintains itself and, (2) the material conditions under which it is realized. In considering the form of individual maintenance we turn our eyes inward and seek to determine the way in which the self characteristically defines itself in individual outlines. In another place we have found the distinctive categories of the self to be individuality, self-identity, personality, personal identity.[1] These categories answer the question as to the form in which the self becomes internally defined, just as the outer world becomes defined under the categories of space and time and cause. Now if we take individuality as representing the form which selfhood assumes, the other categories will stand as representing the means by which the individual form of existence maintains itself in the midst of a world of plurality and change. The category of self-identity means in this connection simply that the individual has the power to survive change and that this power consists in the ability to maintain sameness in and through differences. How the different can be the same probably no one will ever be able fully to conceive. We come upon a much knottier question, however, when we ask how there could be any differences in a world that did not continue the same in any respect. We see here that our question involves an absurdity, and that, however difficult it may be to conceive the *nexus* between identity and change, it is obviously impossible that change should exist where there is no identity. The form of individuality provides us with a type of being in which a principle of conservation is involved. Were there no individuals in the world it is difficult to imagine how the world would be able to maintain any kind of identity.

That individuality itself supplies the principle of conservation and maintenance is the doctrine we are here lay-

[1] *Foundations of Knowledge.* Part II. Chap. *Categories of the Subject Consciousness.*

ing down.[1] How being could maintain itself in any other way is beyond our powers of conception. We have only one type of self-maintenance in our experience and that is supplied by our own selfhood. Of course we cannot say absolutely that there is no reality outside of and wholly dissimilar to the types of our experience, but if there be such, it could not be otherwise than wholly indifferent to us; for we have seen that whatever would affect us in the remotest way, in order to do so, must come within the limits of our experience. Now it is in this maintenance of individual being in and through the changes of our world of experience that personality arises. Man persists largely because he asserts himself. It is hard to conceive the persistence of a quiescent nature. The nature that maintains itself is one that asserts itself in a life of outer activities. We call this outer activity, manifestation, and a man's personality is his individual nature asserting itself in a field of manifestation. We are not about to enter on any elaborate analysis of personality here. Our aim is different; namely, to show how personality maintains its identity and unity in the midst of mutations and plurality of forms. A man may have as many different forms of personal manifestation as there are generic types of activity in his nature. He may have a personality of intellect, a personality of feeling and a personality of will. There is a trinity of potentialities in his make-up, although in the same individual one or other of these forms of personality will usually dominate. In the same man there may come about radical changes in the form of his personality, so that he who has been dominantly a man of thought and reflection becomes suddenly transformed into a man of will and action. Through these changes, however, his in-

[1] The deeper trend of science is in favor of the same conclusion. Science finds the fact unstable and relatively without significance until it has been assigned some place in a stable system in connection with which it has real meaning. We have endeavored to show that system itself can be grounded only in an individual nature.

dividuality maintains itself, so that while he may find himself to be a different person, it is still he, the self-same individual, who finds himself passing through this experience of difference.

Not only does the individual maintain itself through changes of form, but also through changes of content. Most startling is the fact that though a man may lose practically all the content of his consciousness so that most of the threads of continuity are snapped, he will still be able to restore himself, provided there be the slenderest thread that is not broken. And this continuity need not be one of time. We defy the time-gap every time we drop into unconsciousness and return to ourselves again. The lapse of time in these gaps is a matter of no moment. Whether we sleep a thousand years or a single night makes no manner of difference, provided, when we awake we can find points of connection between our present and our past. The continuity of the individual consciousness has nothing of physical continuity about it. The physical solution of continuity may be conspicuous; but the continuity of the conscious individual in the sphere of content is one that is maintained by association and memory. The prodigal who has lost himself in the mere rush of outer change comes to himself through association and memory. So if a man were in Hades where he had lost all his connections with any former existence and where his present consciousness were filled to the brim with the agony of the moment, even then the stirring of some recollection or the clinking of some chain of association might start a process of reinstatement that would lead the lost soul to again find itself and regain its status in God's universe. Whether such reinstatements as these ever occur as a matter of fact, we, of course, are unable to say. But the point we are contending for here is that no definable limit can be set to the process of change, so that we can say, to go beyond this point means a solution of the continuity of individual existence. The experience we have is that of the individual

maintaining itself through all sorts of changes and recovering from all sorts of lapses, and the fact that we have and in the nature of the case can have, no experience of total lapses ought to supply matter for reflection to anyone who is disposed to be negatively dogmatic.

We have been dealing with the form of individual maintenance up to this point, and we have seen how the individual self asserts itself personally in the world and how, in defiance of the laws of physical continuity, it is able to maintain its self-identity in the midst of the most startling changes of form and content. We have yet to consider the material conditions of this maintenance. If we take man as belonging to an evolution-process, the obvious way in which he maintains himself in this changing scene is through his relation to heredity, on the one hand, and to his environment on the other. There is a tendency, most inveterate, in dealing with these categories and especially with that of heredity, to contemplate it on its evil side solely, and to regard man as in some sense its unfortunate victim. And it is no doubt true that heredity is in many instances a worker of evil rather than of good. But this arises from the fact that it is indifferent to moral distinctions and is contented to build with such brick as may come to its hand. Let us, however, take heredity as it is, and whether we adopt the Lamarckian or the Weismannian view of its method; in either case, we will regard it as a conserving principle. Heredity is not a builder, it is a conserver. It connects the individuals of the present with those of the past and it enables the present individuals to maintain themselves in connection with the conditions of the past out of which their development arose. Heredity is a principle of transmission by means of which the past implants the germ of itself in the bosom of the present. This germ may contain some evil, but it will also be a purveyor of good and it will be the means by which the individual of the present maintains his organic identity with the past. In short, heredity is a kind of objective

memory, a species of frozen association by means of which we, in organizing our present experience, reinstate and incorporate with it also the experiences of the past. Through heredity the individual self becomes, as it were, a *race-socius*, and maintains itself as the bearer of race relations and characteristics.

The other objective factor is a builder and is only indirectly conserving. The environment is the name for the play of all the outer forces that are at present affecting the individual. Some of these forces are general while others are special. The most general are what we call the forces and agencies of nature which in the form of food, climate, temperature, clothing, vegetable, mineral and animal surroundings, are exerting a constant and very potent influence on the whole development of the individual. Man is in some sense what he eats and in some sense what he wears and what he associates with. Another class of somewhat less general agencies are the social. Man is an organic part of the society to which he belongs, and not only does his environment affect him as an external force, but we have seen how as a child developing toward adulthood, the social enters into his inner make-up and he becomes a *socius* by constitution. Among the general forces that are at work on the individual must also be counted the education-process he is put through in preparing him for the functions of manhood. A system of education is a summation of the culture-forces of the past and the present. It therefore, in connection with inherited social institutions, ideas and customs, all of which are preserved in some form of art, involves a principle of heredity to which the name social may be applied. But on the other hand, it is all summed up and included in the environmental forces which play on the individual, and it is in its totality a building rather than a conserving force.

Now, it is common also to look only on the evil aspect of environment, since in practical life this aspect is usually called to our attention in connection with thieves and the

denizens of slums; but like heredity, environment is indifferent to good or evil. Whatever forces may happen to exist, whether they be good or evil, play upon the individual and influence his development. It is through the environment that the general forces of nature and the social organism bring their activities to bear on the individual in the present, while it is through heredity that the same agencies are enabled to influence the individual through the channels of the past.

If to these general agencies we add the special influences which are exercised by those unique forces that defy classification,—and these may be supposed to constitute no inconsiderable factors in the problem,—we shall have completed our representation of the individual maintaining itself in connection with the web of race- and world-experience in which it is involved, by means of these great objective agents, heredity and environment. These, it is true, give rise to some of the most serious aspects of its struggle with evil, but on the other hand they are the instruments through which man the individual avails himself of the experience of the race. They also enable us to complete our vision of that successful struggle which the individual makes to maintain and conserve itself in the midst of a manifold and mutable world. And they also give us another demonstration of the fact that self-maintenance in this world of ours is only possible in an individual form.

In the last section of this discussion we shall consider briefly man's relation to nature and to God. In our reflections in the chapter on nature, we have taken the ground that man is to be considered as a concrete organism and that it is in his concreteness as a synthesis of the corporeal and the psychic that his relation to nature is to be determined. We simply reiterate that doctrine here and also the conclusions we reached there as to man's dependence on nature. We do not recant here the conclusion reached there that man is a product of nature, provided this conclusion be considered in connection with the doctrine of

nature itself, as grounded in the divine purpose. It is, in short, with a God-informed nature that we so connect man; a nature that embodies the substance and method of the divine purpose in the world. Now, it is in the light of this conclusion that I wish here to consider man's relation to nature from the standpoint of *teleology*. Viewed from the standpoint of efficient and mechanical causation, man is the product of nature. We may concede this and then ask if this be the whole story and whether man be a mere effect of mechanical agencies and nothing more. In order to deal with this question let us alter the point of view and regard nature, as the late John Fiske evidently regarded it, as an evolution-process that is working, whether intentionally or not we do not need to decide here, toward some end that will be manifested most clearly at the point where its forces culminate. We ask, What, in view of the whole process thus reviewed, is man's relation to it? Let us retrace again in imagination the course of nature from the inorganic to the organic and the sphere of living organisms; through these to the point where consciousness enters into and revolutionizes the world. Let us follow the stages of conscious life until we reach that of man, the primate among animals, and let us follow the evolution of his physical organism in connection with the development of his mental, social, ethical and religious experience. Let us follow man, himself a world builder, through the stages of his progress in building up his civilization, fabricating his political, social, moral and religous orders and institutions, together with the rich treasures of literatures and arts and practical inventions and educational systems with which he enriches his new world. Let us connect with this the efforts he puts forth to penetrate the secrets of nature, to overcome and harness her forces so as to make them do his bidding, and the great transformations he is thus enabled to work in his world. If this be the vision we have in our minds, then our answer to the question we propounded will not be unlike that of John Fiske. Viewed

teleologically, nature presents the appearance of a process including a vast system of forces and agencies that has for its end the origin and development of man. We say that it presents this appearance, for we are not here raising the question whether this result be in any sense intended or foreseen by nature. But the whole presents the appearance of a teleological scheme and is capable of teleological interpretation.

If now we abstract the natural from the divine, there will not be sufficient grounds left for asserting any kind of design or prevision on the part of nature. Nature without God is clearly not a teleological sphere, and it is very likely that if man were completely identified with such a nature he would never be able to rise out of the clutches of fate. But there is no evidence that such a nature would be capable of producing such a being as man. Why should a purposeless system evolve as apparently its most characteristic product a purposeful being? Evidently there is something absurd in the supposition. Let us, however, refuse to make the abstraction and restore nature to its dependence on the divine as John Fiske did in his thought; the teleological appearance then becomes overwhelming evidence that the world is pervaded with prevision and design. If nature itself is not, when abstracted from the divine, a self-developing system, it follows that its most characteristic and its greatest work, the evolution of man, could not be accomplished apart from the divine purpose and agency. Man is the product of nature but, in this sense; he is the product of the divine energy and purpose working in and through nature to the production of the highest individual results.

What shall we say, then, in conclusion as to man's relation to God? We have treated of this relation from the divine side in the preceding chapter. Here we approach it from the side of man himself. How does the divine enter into man's experience and become a factor in shaping his destiny? In the first place, man becomes related to the divine purpose in the purposes and ideals of his own life.

In his moral and religious experience, in particular, his finite purposes and aims become almost consciously translated into ideals that transcend his finite horizon. His ideals of duty and of moral good, for example, take on something of the transcendent, so that he feels that, however much he may strive toward them, they are beyond the limits of complete realization. Even more pronouncedly is this the case in the field of religious experience. Here man is brought into direct relationship with a transcendent being and the activities of the religious life may truly be said to be inspired directly by the divine presence. In man's moral experience he is brought into vital relations with a divine ideal of life and conduct, whereas, in his religious experience, he is brought into more direct and more personal relations with the Divine Being himself. But while man is most clearly related to God through his moral and religious experience, it cannot be said that there is any point in his experience that is not pervaded with this relation. Take the ordinary course of life with the uncertain vicissitudes to which all finite aims and processes are subject, at every point of our lives bring us face to face with events that present the appearance of divine interpositions and divine overrulings; our purposes are being set aside and a larger design which we did not foresee is appropriating the fruits of our activities. This becomes more manifest if we carry on our observations on the social or rational scale, where we are constantly finding the foresight of the wisest statesman baffled by larger designs which he has been unconsciously furthering in his activities. This appearance becomes translated into reality if we include the divine in the sphere of experience and conceive his agency as operating under the category of an all-comprehending purpose. Moreover, if we take into account our relation with nature, we find ourselves in the presence of forces and agencies which greatly transcend our own. We may put a fatalistic construction on this aspect of our life. But if we regard nature as one sphere of the divine and as comprehended in a divine purpose, we shall be able to see how through nature also our lives are included in this divine order.

CHAPTER V.

FREEDOM AND DESTINY.

In the preceding chapter we have been been endeavoring to show how man's nature is incorporated in the system of things so that it seems from one point of view to be a pure product of the forces that environ it, while from another point of view it stands central in the process of the world as an organic nucleus, and, teleologically, as the final aim and climax toward which the system of things has from the beginning been tending. From the one point of view, man seems the plaything of nature, while from the other he stands crowned as its richest fruitage and its king. Now in dealing with the problems of man's power and destiny neither point of view can safely be ignored. Experience teaches us a double lesson; on the one hand, that we are not kings of space, but are largely products of forces on which we depend and which, therefore, limit and in a sense suppress our agency; on the other, that we cannot abdicate our individuality but are bearers of the prerogatives and responsibilities of real agents in the world. This double insight is one that has not been absent from the minds of men, but it was apprehended in its utmost clearness by Kant who developed the doctrine that has prevailed most largely since his time. Kant had a clear intuition of the fact that, so far as natural causes operate upon man, he is not free or self-determined but is determined, or rather predetermined, by that which is not his own nature. In the

sphere of natural causation, then, man has no power of initiative and his will is not free and self-determined. But Kant had also a clear vision of another side of man's agency, a side that comes into view most clearly in his moral experience when he becomes conscious of demands and ideals that are inconsistent with determination by natural causation and appeal directly and, in fact, imperiously to him as to a being endowed with power of initiative and self-determination. The situation was diagnosed with substantial correctness in the contention that while man is as a matter of fact determined by natural causes, as a moral agent he must be free or self-determining, and that, therefore, in the interests of morality which are the highest interests of his being, he must postulate himself as the bearer of real freedom. This is almost commonplace to the student of Kant. And yet a singular circumstance about it all is the fact that not only does Kant, in the ordinary run of his discourse, lapse into a perfectly mechanical way of representing the situation, but in this he has been followed by his most gifted disciples. The trouble lies in Kant's representation of the spheres of natural causation and freedom as two perfectly co-ordinate worlds which between them halve man's nature and agency. The result is a species of parallelism of opposition, if we may use the phrase, in accordance with which a man's action, in the part of it which lies within the world of natural cause, is determined, while in the part of it that lies within the sphere of ethical motives, it is free and self-determining. In view of this situation I may say that down here in this realm of nature where I mostly find myself, I am not free but determined, whereas, up there where I only get once in a while, my freedom is secure and I become a free agent. In view of a situation so exasperating, one can have a degree of sympathy with the mental state of a friend who irreverently damned such freedom in round terms.

Now, the corrective of this Kantian dilemma, which

survives in some of our best contemporary thought, will be found, I think, in a less mechanical mode of representation. The Kantian does get at the essentials of the situation. There is this sphere of natural causation to which I am amenable and there is that of ethical freedom which is also my heritage. But instead of supposing that these divide our agency into two hemispheres, in one of which it is bound while in the other it is free, and that these are perfectly co-ordinate facts, let us change our figure and represent our experience, as it manifestly is, as a process, a progressive movement toward some goal that represents its completion. In a process or evolution there is always a *pou sto* or point of departure for the movement and there is a *goal* or ideal in relation to which it is going on to complete or realize itself. And there is a true sense in which this point of departure is found not simply at the beginning of the race but at every stage of it, as the point of reaction of an effort upon its base. There is also a corresponding sense in which the ideal goal is not simply at the end of the race, but in every stage of it as the movement of forward impulse and realization. The point of departure and the goal thus enter constitutionally into the process in all its stages and determine its real nature. If, now, we translate the Kantian hemispheres of agency into terms of this latter relation we arrive at the conception of a much more real situation and one that our experience renders intelligible. There will still be a sense in which our action is determined and a sense in which it is free, but the moments here will be in normal relation. We shall be helped by this mode of representation to see that the sphere of determination in our action practically includes our whole equipment. The runner at the point where the race begins is the result of a lot of causes which have brought him up to his present state of efficiency, without which he would not be in the race. This is the sphere of natural determination. The ground he stands on, his attitude of readiness to move at the signal, as well as his whole present state of training, all belong

to this category. The stake he is to reach, the plaudits and the material prize, these also contribute to the natural conditions of his action. But with all these and even with the signal to start, the runner might stand there forever, like the Greek athlete in bronze, were it not for the pressure of an ideal purpose in the runner's consciousness, his clear apprehension of what *is not* but what *is to be*, and of what is to be because he has ideally made it so. There is this moment of the self leaping forward to the realization of an ideal self qualified with an experience to be realized. It is to this part that the signal directly appeals and it is this ideal purpose that takes the initiative and loosens the tense muscular activities which carry him to the goal.

Returning with the fruit of this illustration to the main question, what we wish to maintain here is that the sphere of natural determination is related to that of freedom as that which *is* to that which *is to be*. Freedom is not a thing that can be achieved once for all and held as a permanent possession like a demonstrated proposition in geometry. He who sits down to enjoy his freedom loses it. The sphere of freedom is that of ideal purpose, through which the present fact, my naturally determined status, becomes the basis and point of departure for the initiative of free agency, that is, for the initiative of an ideal causality that is motived by the *what is to be*, by that which in that purpose stands ideally realized. It is not true, then, that down here where I am for the most part I am bound by natural causation, while up where I find myself "every little while," as our neighbor, *The Philistine*, would phrase it, I become a free being. Rather, my freedom as well as my servitude is included in every moment of my conscious life, and the respect in which I am determined by natural causation stands in my experience as the indispensable point of departure for the respect in which I am free and self-determined. If a man were not the bearer of this power of *ideal purpose* through which he

anticipates experience not already his, he would not be a subject of freedom. But then his whole life would lose its significance and he would virtually lapse into the bosom of inanimate nature.

We go on, then, to consider man's power (1) in his relation to nature, (2) in his relation to God. In both relations man's power has been debatable and has often been denied, the antagonist being, on the one hand, the materialistic determinist, on the other, the fatalistic theologian. In dealing with the problem of man's relation to nature the materialistic determinist points to the fact that has already become familiar; namely, that man is in an important sense a product of nature. The determinist of this species is usually an evolutionist and is impressed with the conviction that man is a pure product, in fact a mere plaything, of this process. He is also impressed with the aspect of natural determination to which we have called attention above. As a rule he is a deep student of biology and a physiologist who has made a specialty of the nervous conditions of conscious action. He has perhaps taken up the pathological side of the investigation and has learned how closely abnormal states of mind are related to abnormal physical conditions. On the social side he has been a student of criminology and has learned how criminality is so largely a matter of the genealogical tree. Little wonder, then, that he has become a materialistic determinist, and is disposed to deny freedom with a degree of dogmatic impatience.

Now, there is no disposition here to challenge either the truth or the importance of this point of view. Those philanthropists who presume to ignore heredity, for example, in dealing with the products of the evil side of our civilization, will find themselves as far astray as the jurist who ignores the close dependence of actions, even in their moral aspects, on physical conditions and essays to treat all abnormal actions as crimes. The truth that the materialistic determinist brings to us is vitally

important, though what we claim here is that it does not require that we become materialistic determinists. What we claim is that the believer in freedom is able to accept the whole budget and deal with it more intelligently than does the materialistic determinist. What, we may ask, is the characteristic fault of the latter? Manifestly a tendency to a low if not a contemptuous view of human nature. He sees man as a creature who is run by the physical forces that enter into his make-up, whose whole character will be changed by a lesion in some organ of his brain, in whom a particle of matter lodged in some crevice of his nervous organism will let loose the imprisoned criminal impulses; a creature whose whole life-activity has been predetermined by the vicious practices of his ancestors.

His case seems to be invincible and we feel like mere infants in the hands of his merciless logic. We are only dissatisfied when this is put forward as the whole truth about man, and as the best that can be said about his agency. And this dissatisfaction is not completely allayed when we remember that what the materialistic determinist delights to show up on its evil side has also its beneficent aspect and is, in fact, as efficient a conserver of good as it is of evil. Our dissatisfaction voices itself in the contention that there is another side of man's nature which the lance of the surgeon does not penetrate. The philanthropist and the home missionary have also their insight into life and their story to tell, and this story will be valuable in proportion as the philanthropist or the missionary be a wide-awake, sensible man ready to look at situations as they really are. Let our college settlements in the slums of our large cities and the efforts which our most sensible home missionaries are putting forth to reform the weak places in our civilization speak from their own characteristic point of view and in the light of results that are actually being accomplished. With the terrible vision of man's enslavement to his evil heredity and the vicious environment in which he is bound, there can be no dis-

position to deny the truth in the doctrine of the materialistic determinist, nor to underrate the importance of a revolution of the victim's external conditions. The thoughtful man follows with keenest sympathy the heroic struggles of Mr. Jacob Riis to turn Mulberry Bend into a park and to restore the playground to the children. And he is likely to find the final ground for his hope for humanity where Mr. Riis himself finds it, in faith in man's ability to rise out of the most hopeless conditions into a higher spiritual heritage. Mr. Riis has the vision which a greater than he once had of man as a son of God and with the inextinguishable capacity in him to struggle up toward the realization of that divine sonship. Were man a being who was a complete victim of his circumstances and who required to be lifted bodily out of the state he was in into a higher plane, by the operation of agencies that were external to him, he would then deserve the low opinion of the materialistic determinist. But then the college settlements and the home missionaries would have no vocation and our churches as regenerative agencies might close their doors. It is because man, through his divine faculty of forming ideal purposes, has the power of initiative amid his circumstances, and has the capacity for responding to spiritual motives and appeals, that there is any hope for him at all in this world. All help is, in the last analysis, conditioned on self-help, and (we hope it can be said without irreverence) the power of the divine to help the human depends in an important sense on the power of self-help in the human.

We have only to put the two solutions together,—that of the materialistic determinist and that of the missionary philanthropist,—in order to have again presented the dual aspects of man's life. There is a sphere in which we are the products of nature and, if you like to put it that way, the victims of the play of natural forces,—a sphere in which we have no initiative and no power but are what our heredities and environments have made us. But this is

only one aspect of the case. In the midst of these conditions which have determined us and which contrive to do so to the end of the story, man is also the bearer of the power to conceive ideal purposes and to initiate through them courses of action that lead to their realization. This capacity is constitutional to him as a human being, and its elimination would be destructive of his agency. Let us, then, define freedom as man's power to conceive ideal purposes and to put forth activities for their realization,[1] and we shall have attained a notion of freedom that will not only fit in with our servitude, so far as it is real, but will also harmonize with the testimony of our own experience. The appeal to consciousness as a witness to our freedom, though of very ancient date, has in recent times fallen into disrepute, and this is, in part at least, due to the fact that consciousness was asked to testify to more than it knew,—to that, in fact, which was not borne out by the voice of experience. What consciousness does bear witness to is man's possession of this imperishable capacity for initiative in connection with his ideal purposes. Now, consciousness may testify to this while also bearing witness to the fact that we are largely determined by natural causes. We are conscious of our present status, of what we are, as well as of our ideal purposes, of what we aspire to and resolve to become. The process of realization which involves both moments is one within consciousness, and consciousness no more testifies to absolute and unqualified freedom than it does to unmitigated slavery and determination by natural causes. Our consciousness, when we interpret it rightly, testifies to a double fact. It recognizes our dependence on what we are, but it also testifies to our

[1] We state the case of freedom broadly here and purposely so in view of the fact that in former discussions we have limited the proof of freedom to ethical choice, in which man is clearly a *vera causa*. We purposely limited the claim to its strongest case, while believing all along that all reflective choice that is made in view of an ideal purpose is free.

ability to conceive in the form of ideal purpose and to realize what we are not.

We do not wish, however, to slur over or conceal the dark negative side of this picture. There is the negative sphere of unfreedom and slavery, and man is constantly lapsing into this by inaction as well as forging its chains by evil action. No man is free in any static sense. *We become free by putting forth teleological effort toward the realization of ideals.* Inaction is the lapsing of these ideals and the efforts for their realization. He that says he is free but does not the works of freedom is a liar and the truth is not in him. We prove our freedom by achieving it, and there is no other proof outside of the testimony of a living experience. On the other hand, evil activity will result in the riveting of the chains of slavery. I mean here by evil activity, that which is unethical, rather than the positively immoral and bad, the yielding to the unideal forces that play upon our wills and seek to determine us in a fatalistic way. We are reduced to slavery whether we be the victims of strong drink or of the ultra-emotional in religion. The evil forces may come to dominate us more and more until we reach a stage where we have practically lost our ability to be free. It follows logically, as well as experientially, that a man may forfeit his freedom by inaction; he may reach a point where, so far as human agencies are concerned, he is past regeneration simply because he has, to all appearances at least, lost that power of self-initiative on which all helpfulness is conditioned. The divine helpfulness may rebuke our short-sightedness by coming to the aid of such a one and thereby proving that the germ of freedom still smouldered, but the law holds good, notwithstanding, that freedom is the pearl of great price in our nature which by neglect or abuse may be lost.

We thus come to the final problem of freedom; namely, that of man's power in relation to God. Here we are confronted with the companion of the materialistic de-

terminist, the fatalistic theologian, who has become so impressed with the sense of the divine agency in the world, and especially with that phase of it which he calls the divine sovereignty, that he can see no place left for real human agency. This was the fault of the great Edwards and it is the characteristic fault everywhere of the type of mind that is liable to become what is called God-intoxicated. I suppose we have here the reason why Spinoza is called the God-intoxicated man, in that he falls into the characteristic attitude of seeing the divine everywhere in a sense that is inconsistent with the reality of any other agency. In Spinoza's case, however, it was an intoxication of thought rather than one of feeling, while in the case of Edwards and the mediaeval mystics it is largely an intoxication of feeling.[1] What the God-intoxicated man realizes is the absoluteness and the all-inclusiveness of the divine agency and this vision so impresses him that, in magnifying it, he practically annihilates the free agency of man. Now the fault of Spinoza and the fatalistic theologians does not consist in the fallacy of their intuition. We owe them an imperishable debt for the clear revelation they have given us of the absoluteness of the divine agency and its all-pervading and all-controlling relation to the world. The characteristic fault of these thinkers springs directly out of their method which starts with an *a priori* conception of God and attempts to deduce from this the whole doctrine of God's relation to the world and man. This is a reversal of the method of experience in which man, in his efforts to realize the world and in the evolution of his own consciousness, finds the place of the divine in his life and through the idea of God thus achieved is able to include

[1] I do not mean to say that Edwards was dominately an emotionalist. He was one of the keenest thinkers the world has ever seen. At the same time it is possible in Edward's case to trace the motive of his most penetrating thought back to mystical grounds. The dialectic of Edwards is keenest when his emotions are at a white heat.

the notion of the infinite in that of experience. But a necessary presupposition of this method is the reality of man's own experience and the processes through which he has been able to reach the divine. Man cannot deny the reality of his own agency, then, without reducing all that it enables him to discover, to illusion, and he is thus committed to the maintenance of his own reality. It follows that a deductive concept of God which necessitates the suppression of man's agency as unreal, can find no solid support in experience. The thinker who attempts to treat such a concept as an absolute starting-point in his thought is likely to share the fate of the woodman who cuts away the branch on which he is standing.

What, then, is the truer way of dealing with the problem of man's freedom in relation to the divine? In the first place, man is conscious of his own agency, that he is a being capable of conceiving ideal purposes and of putting forth efforts to realize them. We saw that this capacity constitutes man's distinctive claim to freedom in his relation to nature. The reasoning in this case is that, whether nature be capable of acting in a purposive way or not, man possesses this capacity and is, therefore, a free agent. Now from data in experience which we do not need to recount here, we reach the conception of God as a purposive being and as related in a grounding way to the whole world of existence, including man himself. We have, then, the vision of a world composed on one side, of a multitude of finite purposive agents, while on the other there is one infinite and all-comprehending purpose in which this finite plurality is grounded. The vital nerve of the problem arises here in the relation of the finite purpose to the infinite grounding purpose of the absolute. Let us take an analogy from the relation of man to nature. In the sense in which man is a product of nature he may also be said to be grounded in nature and comprehended in its processes. This is a direct relation and is constitutive of man's present nature. But we have seen that this does not militate against his freedom, but

rather supplies the point of departure for the exercise of that freedom. Man is a free agent, not in spite of his dependence on nature, but rather in connection with that dependence, his real freedom growing directly out of it. Now, we do not know whether nature be purposive or not, but we know that God is a purposive agent and that we finite beings are related to him directly in the purpose he entertains toward us. Is there anything in the notion of purposive agency that necessarily militates against the freedom of the finite agent by subjecting it to direct divine determination? We have seen that man's organism is directly constituted by nature and yet that this does not destroy his free agency. How could the divine purpose operate upon man directly? The only way we can conceive is in that initial activity in which the existent, what we call the self, is posited or instituted, an activity which we can describe but cannot penetrate. It is by virtue of this act of the divine agency that man is, and we have only, like the old theologians, to conceive this activity as representing a permanent connection of the divine with the creature in order to identify, as they did, the functions of origination and maintenance. It is then by this direct relation that the finite is maintained in being. Now, this divine activity no doubt institutes that germ of individuality which eventually unfolds into selfhood and the question which we meet here is whether or not we are shut up to the pantheistic doctrine that in this activity God is simply instituting a finite mode of asserting his own agency.

To such an answer there are two objections. First, it is an example of that method of *a priori* deduction which attempts to override experience, from some supposititious standpoint of absoluteness outside. But, second, we have found in our analysis of the situation which arises in the social and religious consciousness, that selfhood involves a core of perfectly unique, unsharable being, an inner citadel of self-assertiveness, the invasion of which would suppress our individual standpoint completely. We have seen that this is

a feature of the relation which cannot be suppressed even in the closest approaches of the finite soul to God because it would involve the disappearance of the self-term of the relation and therefore its annihilation. The soul, in order to be a real agent in its approach to God, must maintain this inner core of self-assertiveness and we may suppose that it is just this that is immediately sustained in being by the divine agency, and that creation, whatever it may signify in mode, means just this in the content which it realizes. We could not conceive otherwise how any *new* being could come into existence. Instead, then, of drawing the pantheistic inference, we shall, if guided by the deeper analogies of experience, come to the conclusion that pantheism is a misreading of the situation and that the real relation of the divine to the finite human is one that is not only consonant with the real individuality of the finite, but *is in fact constitutive of that very individuality.*

The direct relation of God to man is to be conceived, then, as one that is constitutive of real individuality. Man must be more than a mere finite mode of the divine purpose or he cannot be said to possess any true reality. This conclusion does not, however, close the door against the possibility that man may be in a very real sense a finite mode of the divine. In the very constitutional type of his being he is a *finitation,* so to speak, of that ideal selfhood which we conceive God to be. In man God is instituting finite replications of himself, natures which find their ideals of life and good realized in God and which are bearers, therefore, of a divine destiny. It is not altogether false, but only an abuse of analogy, to characterize these finite selves as "bits of the absolute." If the phrase be taken as loosely symbolic and not strictly scientific in its meaning, it may be adopted as serving a good purpose; for there is a vital sense in which our lives are continuous with the life of God. A rigid interpretation of the phrase would lead, however, to a violation of the deepest analogies of our experience. God realizes his purpose in the institution of these

finite replications of himself, but his purpose, if it be adjudged from the point of view of experience itself and not from some outside standpoint of absoluteness, contemplates in these replicates not mere modes of himself, but unique centers of real individual agency. There is nothing, then, in the direct relation of man to the divine purpose that militates against his free agency. By virtue of that relation man is able to become a real agent in the world.

What can we say, then, of man's less direct relation to the divine purpose? Can we say that God is absolute sovereign in his world and that man is yet a free agent? This has always been a burning question in theology and the wisest theologians have always maintained, even while declining to undertake the burden of proof, that the divine sovereignty is consistent with human freedom. It may be admitted that on first blush appearances are against such a doctrine. If God and man both be purposive beings; then if man be a free agent his purpose may clash with that of God and the danger arise that God's purpose, in part at least, be defeated. How is this contingency to be avoided? If God's purpose be liable to be defeated even in part, he is no longer sovereign. Rather than admit this possibility the religious thinker will consent to sacrifice his own freedom. But we are sure that no such sacrifice is required. If we distinguish between the inner and direct relation of the divine purpose to the human soul, that relation in which its institution and maintenance is involved, and the more indirect relation which arises between the purposes which this finite agent forms and the all-including divine purpose, the real point of the issue here will begin to be clear. The question here is not how the finite purpose can exist as a real purpose within the scope of the divine, for this is provided for in the reality of the being constituted in the direct relation. The question here is that of the correlation of the purposes in such a way that the free activity of the finite may be respected and the

untrammeled realization of the divine purpose at the same time secured. The form of the solution has already been indicated in the distinction drawn between the inner purpose itself and the sphere of outer activities through which it is realized, and it is this distinction which we wish to elaborate with some further detail here. When we consider our purposes in relation to the means by which they are realized we find that while the initiative is our own, including the determination of will that something shall be which is not yet,—that while this is our own, yet the whole objective mechanism which is set in motion to realize that purpose is not our own but belongs to a system, the parts of which our wills have some mysterious power of influencing, but over which as a whole we have no conscious control. Let us suppose, then, that there are a plurality of wills like our own which have this faculty of forming purposes and of influencing in some way parts of this objective machinery for their realization. If there be a divine will whose purpose is the organ of an all-comprehending thought which knows the world, including your purpose and mine, through and through; may we not suppose that this purpose will be directly related to the whole of the mechanism of realization and that it will be able to employ it, including the very activities which are realizing the finite purposes, to realize the all-comprehending divine purpose, so that just as a commanding human intelligence and will may shape the destinies of a state by co-ordinating forces and activities, some of which may have been initiated for its destruction, so God in like manner, but in a far more absolute sense, may move triumphantly on toward the completion of his designs, not suppressing or interfering with, the freedom of the finite agencies, but making even the wrath of wicked men to praise him?

This illustration will serve, we think, to clear our thoughts on the question of the possibility of free human activity in a world where the divine sovereignty is maintained. The question of *possibility* is in truth the only one

at issue. For the voice of experience is not doubtful in its testimony to the fact of untrammeled free activity on the part of man. The fact is clear enough and all our conduct in life proceeds on the presumption of its validity. It is only when we consider the more erudite aspect of experience and seek to connect our activities with their ultimate grounds, that we begin to fear our fact may be a mere appearance. The doctrine that it is such has had wide vogue in philosophy, and it has invariably led to a total or partial suppression of the reality of the finite agent,—pantheism representing the logical extreme in this direction. We are convinced, however, that this pantheistic interpretation is not necessary; that, on the contrary, it is the result partly of a mistaken method and partly of a confusion of thought. The method of experience leads up to God and it links the finite soul vitally with God, but it carries its own corrective with it in the inextinguishable sense of its own reality and of the essential uniqueness of its own being. The method of experience forbids that at any point in our approach to the divine we surrender our own individuality and become simply an organ of the divine life. Again, the pantheistic conclusion is partly due to a confusion of thought, for if we distinguish the direct relation of the divine purpose to the human soul, the activity in which it is constituted, from the indirect relation, the activity in which the divine purpose is co-ordinated with the finite human purposes, our thoughts will be on the way to becoming clear on two fundamental points. In the first place, the direct relation of God to the human soul is not pantheistic but constitutive, rather, of real individual existence; while in the second place the relation of the divine purpose to the human may be construed in a way that confirms the testimony of experience to the freedom of our own finite agency and at the same time guarantees the fullest sweep of the divine sovereignty.[1]

[1] I regret the necessity of dissenting in a measure from two of

The destiny of man is a theme in regard to which our conclusions will be influenced largely by our views as to man's power and freedom. His destiny will involve all his relations; those which bind him to nature as well as those which bind him to God. If, with the materialistic determinist, we regard man as the mere product of nature, completely subject to its laws, we shall then be disposed to put a light estimate on his power and limit his destiny to the place which he occupies in the time-series to which he belongs. The dropping out of his individual organism from the place it has held in the series and the dissolution of its corporeal part into its elements, will constitute the final chapter of his destiny, and his death will strictly end all. If, again, we have gone over to the camp of the pantheist and regard man's relation to the divine in such a way that his organism stands as a mere finite mode of the divine activity in the world, then it follows that the dissolution of this organism will carry with it all that is distinctive in the individual consciousness and that man's conscious part will lapse into the ocean of the divine consciousness. In this case, again, death will end all for the individual. Let us, however, refuse to go to these extremes and while agreeing that, on the one hand, man is in a very important sense a product of nature, and on the other, just

Professor Royce's doctrines. In the first place I feel that with all his fine insight he does not quite succeed in making the Kantian doctrine of freedom tractable to experience. Man's freedom still dwells too much in an ultra-experiential region. The only way to preserve freedom and at the same time to bring it into vital relations with the daily business of our lives, is in my opinion, to identify it with the fundamental, self-asserting effort of individuality itself, so that whenever man asserts himself as a self-initiating agent in the world, he enjoys his freedom. The second point is that of the relation of the human to the divine agency. I fail to see where in Royce's theory of the grounding of the individual in the divine purpose, the point of my own self-assertiveness as a real being, is adequately secured. The theory seems to leave the individual open to the peril at least of being so completely merged in the divine purpose as to become practically unreal.

as really a finite replica of the divine, the type of whose life is also the form of his own, let us put the emphasis on the other side of the picture which presents man in his relation to nature as the bearer of a purposive activity relating him to a world of ideal existence that is to be, and in his relation to God as a unique individual whose being cannot be translated into a mere organ of the divine, but is the bearer of a purposive activity which not only is free in its initiative but has free scope in the world. If we thus regard man as a free agent capable of conceiving ideal purposes and of realizing them in the activities of his life, we shall be disposed to modify our conceptions of his destiny accordingly and admit, at least, that there is a problem beyond the solution that is given by death.

Let us consider in the first place the grounds out of which the problem of man's destiny arises. There is one event which happens alike to animals and men, that is, death, and in appearance, for men as for the animals, death seems to end all. We have no reason to suppose that the animal is in a position to contemplate this tragic ending of life. No animal, we may suppose, has any conception of death or makes any conscious calculations founded on its approach. It has no hopes or aspirations, then, which are liable to be crossed by the shadow of death. This is the difference between the animal and the man. The man has realized death as a fact; he has formed a conception of it and broods upon it as it approaches or threatens, and its dark shadows fall across the pathway of his hopes and aspirations. This leads him to attempt to read the meaning of his life in the terms of its brevity. He is part of a social and historical world-order which he calls humanity and he sees himself as a being who for a brief span participates in this life of humanity, shares in its aspirations and ideals, enters into its struggles and pours out his heart's treasures for its good; then in a moment he has fallen into oblivion and the current sweeps on without him and apparently unconscious of

its loss; for other individuals come forward to take the place of the lost,—and what are a myriad or two of individuals more or less any way? This brevity of life and the apparently small estimate which the social order puts upon it, is a fact that affects man's sense of all the values of things. If the life of the individual be thus brief and relatively of so little worth, then the things which men strive for are to be judged accordingly, and the greater part of that with which man has been laboriously enriching himself may be thrown overboard as worthless. With a sense of relief we may imagine a man turning to what is left. At least the problem of life has been simplified, he will think, and in this he will not be wrong, for what is left to care for is simply the interest of the span-life of the present. This, in fact, is all that the animal has to care for, at least consciously, and why may not man thus limit himself and be happy? "Let us eat, drink and be merry for to-morrow we die," was not the utterance of a man who ranks as one of the world's fools. Its author was a man like Omar who had rightfully gauged the world of the present span, when once it has been torn loose from its connections with a larger whole, and its values have been determined in terms of its own measure of existence. If life is to last only a day, and that is the end of it, there is no scope for any kind of postponement. To sacrifice the present would be to miss living altogether, and self-denial would become identical with the denial of life. It is not to be supposed that either the ancient or the more modern sage meant to make any plea for a selfish life. Their counsel is, to make the most of the present life and the present span which contains in it the sphere of sociality and the generous as well as the selfish deed. It is not the pig-sty ideal of life we have here presented. Rather, it is an ideal for which there is much to be said. A man ought to make the most of the present and he is justified in including as much of the pleasure of life as possible in the present moment. The refinement of this ideal is very attractive and presents

us with the picture of the elegant and cultured gentleman, given to hospitality, refined in all his tastes, instinct with sociality, an eminently clubable man, who passes through life without rancor, and when at length he drops out leaves a large circle to lament the loss of a genial presence. This is perhaps the ideal which the average man would regard as in a sense unapproachable.

Now, we may ask, what is the trouble with such a life? We cannot answer the question by simply looking on the one picture. But we have ringing in the chambers of our memory that fine old saying of Augustine with which he begins his Confessions, "Thou hast made us for thyself and our souls can find no rest until they rest in Thee." Perhaps, however, our old sages themselves will betray the reverse of their ideal in the very terms in which life is described. To both of them there comes an overwhelming sense of the vanity and worthlessness of life with an incurable weariness and *ennui*. Its pleasures soon pall and its attractiveness becomes stale. Its very changes weary with the monotony of their tread-mill self-repetition, and the sweets of recurrent enjoyments turn into bitterness, until the call to revelry becomes a reminder of despair and of the mocking death's head which sits grinning at their feast. Now, the evil spirit which mars the picture and turns the riches of life to dross is not anything that is present in the picture itself,—not any feature that perhaps ought to be eliminated, but rather something that the artist has left out. There is something in life that is not in the representation and it is this forgotten element that turns up as the root of bitterness in the sweetest enjoyment of life. What is this vital element? Is it not the ideal of a continuous and progressive life; the ideal of life as a struggle to realize the infinite; a struggle out of which comes all the permanent good of being? What else have these men done than mistake the profounder significance of their own being, a mistake which leads them

inevitably to the vain effort to force their lives into the Procrustean bed of a purely finite mold?

As we go on with this exposition it will become evident that such is the fatal defect in the life ideals which these men set before them. We find the germ of a pessimistic view in Kant whose steady look at life revealed to him the root of evil that was in it. On the side of knowledge Kant also found a chasm between the finite which is knowable but lacking in worth, and the infinite which we value at the highest but cannot know. What more natural than that the old philosopher should have despaired of a life thus bound in the *aes-duplex* of ignorance and evil? We stand breathless, expecting to hear him join the two sages in counseling a species of self-oblivious absorption in the sensuous enjoyments of the present as a means of temporary forgetfulness of the ghastly failure of life, just as the drunkard seeks oblivion in his cups. But no, Kant is made of sterner stuff and an intuition comes to him which the others did not see. Let it be true that my present moment of existence is bound in evil and ignorance, and that, viewed under the mere finite time-span of the present, it presents the appearance of futility from every other point of view than that of the enjoyment of the present moment. Why should I not continue to contemplate it under this mere finite time-span? Because I find in myself the capacity; nay the pressure, of moral ideals whose scope is infinite and which forbid my attempting to limit my life aspirations to any finite horizon. And the significant fact about these ideals is that they involve all that is of supreme value for life. If I throw them away I part with all that makes life worth living. If I turn my back upon them I am immediately facing the darkness. If I lose faith in them because they are infinite and not to be compassed in any finite span of existence, there is no other faith, that can sustain life in decent dignity, to take its place. Life is a moral process, a progressive realization of an ideal which commands me "up and onward forever more." The whole

worth of my life is bound up in this ideal, and all the permanent riches of life are gained in the effort put forth for its realization. But this ideal is not a practical goal that can be begun, continued and ended in any merely finite existence; it is only practicable to a being whose real life is not circumscribed by any time-span, whose struggle is not a mere phenomenon of a temporal order, but all of whose goings are those of one who has had a vision of the eternal.

The doctrine of man to which we have been led by a study of his experience, presents his whole life as a teleological struggle toward the attainment of that which is not but which is to be. A cross-section of man's experience at any assignable point will, therefore, reveal the fact of unattained ideals. The worth of life consists not in its present possessions, but in what it sets out to be or to become. This is the deepest fact of life, the one that the pessimists overlook to their undoing. Taking this teleological measure of life, let us see how it works out in man's experience. Man, we say, is an end-seeking being and his fundamental aim is to achieve some good, say, happiness or culture. But in seeking this good he finds that he cannot pursue it as an isolated individual, but that his social nature binds him to his kind in such a way that his ideal of good will be wrecked if he does not translate it into terms that shall include the good of others as well as his own. But this enlargement is not sufficient, since out of the social consciousness arises the ethical with its ideals which refuse to conform to any finite limits. Man's ethical consciousness brings him into relations with distinctions of right and wrong, good and evil, and it brings to bear on him the pressure of ideals of life which have no finite measures. But the story does not end here. The religious consciousness is just as real in experience as the ethical, and here the teleological movement of man's life reaches its climax in an experience in which he is brought face to face with the life of the *eternal*, and to the realization that in the life

of the eternal, his own life is rooted. In the religious experience man seems to attain his true life in the life with God, and this experience fulfills the Augustinian invocation by leading the finite up to the point where it finds, fully realized, those infinite ideals after which it has been dimly striving from the beginning.

Man's life thus takes the form of a teleological process, a struggle toward the realization of ideals which may not be imprisoned within the four walls of any present experience. The progress of his experience tends to bring the infinite lineaments of these ideals into clearer and clearer light. The progressive stages of his social, moral and religious life are the unfoldings of one story, the end and meaning of which is that the only satisfying measure of the life of a being like man is a divine measure, one that will take in the broad sweep of the eternal and enable him to fellowship with God. Now all the proofs of immortality from Plato down to Fiske have rested on the presumption of the teleological character of man's life. To Plato man's nature is of divine origin, but he is immersed in sense. There is, however, a divine capacity in him and his true knowledge as well as his true good consists in rising to the contemplation of the eternal archetypes or ideals of reality. A being whose true ideals are thus infinite and eternal cannot perish, but must be the bearer of an eternal existence. The Platonic proofs have supplied the model of all proof in this field. Kant seizes on the principle and magnifies its ethical aspect; John Fiske puts his faith in the same principle on its naturalistic side and argues from the teleological character of the evolution-process of which man is the climax, to the perdurability of man himself. God would not take such infinite trouble, he thinks, to produce such a being as man, just to let him drop in the end like a broken toy. Moreover, the normal progress of man's experience is in the direction of more permanent ideals. Shall we put reason to permanent confusion by supposing that these ideals are mere illusions and that the bearer of them

lives but to obtain a glimpse of them and then drops forever out of existence? The argument of Royce strikes deeper but is still Platonic. Man's life is not only rooted in the divine purpose and itself teleological and purposive, but he is, as it were, a naturalized citizen of the eternal world. Like the inhabitants of Beulah-land, he speaks naturally the dialect of the "Celestial City," and it is contradictory to the whole scope and horizon of his normal existence to suppose his life to be measurable by any finite time-span. Man's life is essentially eternal, and by that Royce means more than mere endlessness in time, though that is included in the conception. The eternal life is the divine life which is realized in every moment in its completeness and is not, therefore, partitioned up by the time-series into a vanishing past, a momentary present and an unrealized future, but includes these moments in an all-embracing and ever-present experience. Man is the natural inheritor of the eternal, and is, therefore, immortal.

Much as they differ, the tenor of all these arguments is practically the same; they all proceed on the Platonic intuition of the teleological character of man's life. Involved in man's inmost constitution are certain divine ideals which at first are mere germs hidden by the thick coatings of his sensuous nature. They are vital germs, however, and soon begin to emerge, planting themselves before and in man's consciousness, making it forever impossible for him to satisfy himself with the life of the mere present time or sense, and translating his whole existence into an effort to realize an ideal life which *is* not at any given moment but ever *is* to be.

What, then, is the significance of these proofs? Is the view of life on which they rest to be taken as expressing its real meaning? Or do they proceed on fundamentally mistaken premises and do they embody a species of ungrounded romance of the aspirations? Let us consider again the dilemma which arises in our experience. We have seen that from one point of view, and that the most obvious and

obtrusive, there is nothing so perishable as the individual existence. Man belongs to a social order which is vastly more permanent than himself, and to a world-order in comparison with which his life-span is a mere moment. He is the most perishable of all the things with which he deals. The trees he plants, the houses he builds, the institutions he founds, the business firms in which he is partner, the books he reads and perchance writes,—these all survive him, while he, the creator and the enjoyer, the being for whom these things exist, drops out of the story and crumbles to dust. It is not possible to exaggerate from this point of view the brevity, the futility, the worthlessness of life. The most despairing plaints of the world's literature stand justified and the scorn and contumely which the pessimist pours upon life seems like the noble raging of a soul, born for better things, against a fate which defeats all its worthy aspirations. Truly in such an existence the only point of reality is the present moment. All ideality is futile, since there is no time for ideals. He who saves his life loses it, and loses not to find, for on such a view there is no bank in which life can secure its funds. The true wisdom, then, is to spend the treasure out of hand and leave the future, if there be such, to save itself from bankruptcy. So the wise man counsels prodigality of present resources, absorption in the sensuous present, oblivion of the future and the ideal aspirations it contains. But life has something in it that laughs such wisdom to scorn. The root of bitterness mixes inevitably with the wine of the present and in the end a life of the mere present, a life without ideals, proves to be a life that is not worth living. It is a life in which death sits enthroned at all the feasts and propounds to fool and sage alike, its sphinx-like riddle, "If death end all and you mortals be nothing but ephemera of a day, what signifies your life one way or another, and why not fling it out of hand into the maw of death, the insatiable devourer of you and your children?" Truly death has all the logic on its

side. We suppose the animals to be contented with their finite span of existence because they have no vision of the destroyer and no meditations on death. But man is a creature who meets the destroyer face to face, and every moment of his existence is troubled with premonitions of the dark spectre that will inevitably cross his path, and of the annihilation that lies beyond. All life thus becomes "a meditation on death."

But let us change the picture and look upon life from a different point of view. Man's life has now taken on the aspect of a teleological process at the center of which moves his own individual self, seeking to realize itself and the world. We have seen in the middle section of this book how the arduous process goes on from step to step and how the individual dominates all the stages, constituting their form and at the same time their final end. We see how this individual comes to dominate his world and how the unification of the world itself finds its last hiding place in the consciousness of the individual. There can be no ground for denying the value of the individual in view of this fundamental relation to the world. But let us add another chapter to our story, the history of the processes in which man's social, moral and religious consciousness is awakened and through the awakening of which new worlds are entered and new ideals are stimulated into activity. We find here the teleological process relating itself more and more intimately to ideals which are transcendent and to a life which is lived with God. This individual thus dominating in the world and asserting his fellowship with the divine, How can he contemplate the linkage of his ideals to the mere span of a temporal existence? The vision of his own perishability seems a death-knell to all that is of supreme worth, and in the interest of the only life-ideals which seem worth living for, he postulates an existence that in its measure will be commensurate with his standards of worth. Shall we call this an illusion and the postulate simply a thin veil behind which the trembling soul essays to evade its fate?

Let us compare the two pictures of life representing its dark, perishable side and its aspect of greater permanence and hopefulness, and let us ask which one of these is the true representation, yielding the deeper significance to life? There is a sense, no doubt, in which the darker picture is obviously true. No doubt, man is perishable and the individual a creature of a day. The pessimistic version of life has plenty of facts to rest on. But on the other hand, the teleological version is also correct. Man is a creature of ideals and these lead him on to a closer and closer walk with God and to a more and more complete participation in the divine life. And from this point of view man cannot but contemplate himself as the bearer of an eternal existence, inasmuch as all his real interests in life are permanent. Just in proportion, then, as he enters into this life he in a sense realizes his immortality. Shall we then resolve our dilemma by espousing one picture and rejecting the other as untrue? Verily, in that case we should be closing our eyes to the whole world of facts. He who looks only on the brevity of life becomes blind to its more enduring elements, while he who looks only on the ideal side and ignores the perishability of life, misses that which is necessary to keep him in his sober senses. The true solution of the problem of destiny will be found, we think, in travelling the same road that led to the solution of the problem of freedom. Both pictures of life are true from the point of view from which they have been painted and it rests with us to frame them into a representation of life which will be catholic enough to assign to each its true place. In dealing with the problem of freedom, we find that man's free agency rises out of his natural life by virtue of the fact that he has the ability to conceive and realize ideal purposes; in other words, that, as a real teleological being, he is free. His freedom is consistent, therefore, with his natural determination. In like manner, while man, viewed merely as a present phenomenon in a temporal series, can assert no claim to permanence of being and is in the highest

degree unstable and perishable, yet when we take into consideration the teleological character of his activity, and especially that as the bearer of ideal purposes, his life allies itself more and more with the divine, he becomes the natural heir of an existence that is not circumscribed by any time-span, however long. Viewed, then, as a phenomenon of nature, man's life is temporal and perishable, but viewed as the bearer of ideals which lead him on to the divine, man becomes a son of God and a participant in the divine order of existence. We see, then, that man's immortality rises out of the grounds of his mortality and that just as he learns from the facts of his experience to expect death as the end of his temporal existence, so from the facts of his ideal nature and the standards of value which it imposes on him, from the imperishable outlook of his spiritual horizon and from the divine ideals in which his life participates, he is led to postulate an immortal existence commensurate with the fundamental interests and ideals of his life. And the fact that he realizes his mortality only makes the more valuable to him his own divine sonship and his part in the life of God.

CHAPTER VI.

MAN'S ENVIRONMENT.

We moderns are accustomed to apply the term environment to the whole situation in which a man finds himself in carrying on the business of his life. There is nothing he touches or that touches him in any way which does not in some way affect his life. Hence, his whole surroundings are conceived to be a system of forces which are playing upon him incessantly and shaping the issues of his experience and destiny. The notion of environment is dynamic, therefore, rather than static, and it is a term well adapted to the surroundings of a being like man who realizes his whole good in the effort to overcome and enjoy the world. It is possible, as we have seen, to draw a distinction within this broad conception of environment, between the actual forces of the present and those which have been stored up in literature, institutions, customs and products of art; applying the term environment in a restricted sense to the former, while to the latter, guided by a biological analogy, we apply the term heredity, because these elements do represent a kind of social inheritance. Here, however, the conception of the environment is used in an all-inclusive sense and man's environment is conceived to be coextensive with everything that is capable of influencing him in an objective way through his bodily or mental organism. Taken in this sense, then, we may include all the forces of the environment under the two categories of ordinary and

transcendent. The ordinary forces will include the spheres of nature and humanity, everything that influences a man in his ordinary intercourse with the world and his fellow man.

In the first place, then, man is influenced by his natural environment, which includes, of course, not only his relation to the inorganic forces but also to the forces of the biological world of which he forms an important part. The closeness of man's dependence on nature we have already seen. Not only is man influenced directly and powerfully by his physical environment; he is in a sense formed by it, and, like the chameleon, takes on the very complexion of his habitat. History, anthropology, economics, all unite in emphasizing the influence upon man of his physical surroundings. In fact, the temptation is to exaggerate the effects of climate and other geological agents on constitution and character. But man is even more closely bound up with the *living* system of which he is a part. Here the chains of his servitude bind him not only to his fellow men, but also to the animal world. One of these chains is heredity through which he lives the life of the race and even of the animal world, and epitomizes in the stages of his experience the steps of an evolution which has come down through countless ages. Man is bound to living nature through his heredity, as its product and epitome as well as its crown. Another of these chains is environment, properly so called, to which he, like other organisms, responds, the forces of which are incessantly modifying him and beating him into shape. When we consider, then, what a grip nature is able to take, through these two agencies, heredity and environment, on the very soul of man, it will be conceded that to exaggerate the function of nature in the making of man would be difficult. In fact, it has been shown that it is only through man's capacity for ideal purposive action that he is able to redeem himself from complete enslavement to his natural environment.

Again, man is influenced by his human environment, and this in two ways. In the first place, he is largely the product of its culture-forces stored up in its literatures, institutions, customs and inherited beliefs. Some of these are organized into definite instruments of culture which we call education, but they are all educative forces of very high value. Secondly, we have the operation of man's present human environment. This begins with his infancy, or even his pre-natal period, and extends on to the end of his days and includes the operation of a great complex of forces, to wit, the influence of parents and nurse even before the age of imitation. After the child has become able to observe and respond to what is going on about it, it goes out through the open door of imitation to possess itself of a world of untold riches—the plays and toys of its childhood, the traditions of the nursery and kindergarten, the songs and child-lore that it learns, its child-companionships, quarrels and reconciliations, the gradual unfolding of its social nature as it develops toward maturity, the influence of its social environment, the little circle or clique to which it belongs and which for the time being constitutes its world. The influence of the human environment continues to increase as it expands and the youth blossoms into manhood and passes through the tutelage of schools, societies, out into the broader arena of church and state and the responsibilities of citizenship.

How are we to overestimate the influence upon man of his human environment, especially when we add to the operation of the present forces, the potency of what has come down to him through heredity. We have seen that it is only the assertion of man's higher selfhood that saves him from servitude to nature, and here he is face to face with a threatened servitude no less exacting. Historical philosophers like Buckle not only sell men into captivity to nature, but they also enslave him to humanity and he becomes the victim of a double servitude. They overlook, however, the germ of individuality which asserts

itself against the enslavement of nature and which provides a saving clause in man's relation with humanity also. The very social and cultural forces which mold man are bound to nurture in him that individuality which asserts itself in ideals of life and action and in purposes toward their realization. Through his natural and human relations, man is brought into vital connection with the agencies which are to shape him and without which he would not become a man. His servitude is, therefore, necessary and salutary. But the striking fact of the situation is that these formative agencies are also producing the conditions of their own transcendence; for the being who is forming has in his nature the germ of true individuality and this tends to assert itself more and more the higher he rises in the developing scale. It turns out, then, that after all the infinite pains which the social organism has taken to develop the individual, the individual in the end subordinates the social to the claims of his own higher being, and nature and humanity have, in truth, been simply schoolmasters to bring man to his own chartered freedom.

The whole environment of man is not made up, however, of the ordinary forces, natural and social, by which he is surrounded. We have learned that there is a principle of transcendence in man's experience which leads him everywhere to connect the sphere of finite activities with the infinite. It is an internal requirement of experience itself that the finite and relative shall be grounded in the infinite and eternal. Man's consciousness thus brings him everywhere to the threshold of the infinite and makes him responsive to influences that are transcendent. The function of the transcendent becomes more explicit in his ethical experience where he is brought into direct relations with moral ideals and it blossoms into full maturity in the field of his religious experience. Entering into his experience in an intimate manner, the transcendent supplies some of the most vital interests and the most potent motives of life. It is the spring of the highest ideals and of those as-

pirations which lead man to extend the horizon of his hopes beyond the limits of the present temporal existence. In truth, it is through the experience of the transcendent in the ethical and religious ideals of living that man discovers his highest standards of value. The religious consciousness which brings man into direct relation with the sphere of the transcendent and the great realities which it contains, God and the eternal world, is more potent than any other agency, in vitalizing man's relation to the transcendent, in making the sphere of the infinite real to him and in making him an enfranchised citizen of a world that reaches beyond the limits of the world of ordinary experience. The power which this part of man's environment exercises over him could hardly be overestimated. It brings him into vital relations with transcendent ideals and opens up an undying spring of aspiration and hope in the very heart of his consciousness. So potent is the influence of religion that in its evil form of superstition and servile fear, it threatens man's complete enslavement, while in its higher spiritual and more enlightened forms it is a most potent agent in his true enfranchisement. It is this relation to the transcendent that is the fruitful and perennial source of those deeper convictions of our nature which, resting on no definite evidence, yet hold us true to the infinite poles and, as Wordsworth says, constitute "the fountain-lights of all our seeing." Now, it is only necessary to supplement our story of man's surroundings with that of these subtle and pervasive forces of the transcendent in order to reach a full appreciation of what the environment of a man is in this world and of the conditions in the midst of which he must carry on his life struggle.

In this system it is a man's business to determine his true place and to work out his destiny in the light of the highest wisdom to which he can attain. He will find, however, that the initial problem which confronts him is not one that is easy of solution. Man's true place in the system of things is never determined by accident. He finds that to

trust to accident is to reduce himself to slavery,—to make himself the victim of that world in which he ought to be master. Let us suppose, for example, that a man allows himself to drift, trusting to some blind god of a future to fix his place in the system of things. Like any other waif, having abdicated his prerogative of manhood, he becomes the plaything of the forces which are bearing him on. It is only a short road to the sense of helplessness that overtakes the sport of circumstances, and the despairing sense of his own enslavement soon follows. The waif on the ocean of life has failed to assert his true relation to the system, and hence all the evils that follow,—the feeling of enslavement, despair of accomplishing any good, and in the end an endeavor to find surcease of the sense of life's bankruptcy, either by resort to the pessimist's gospel of cessation of existence or in some mad plunge into the vortex of the sensualist. We fix our normal place in the system by asserting the right of our individuality, that is, by asserting our right to be and to become a central and organizing force in the system to which we belong. What is the significance of this complex environment in which I am placed, and what attitude shall I as an individual take to it in order to work out my true destiny? These are questions which I am bound to ask and my answer to which will be determined largely by the conception I have already formed of my own nature. If I have taken the attitude of the materialistic determinist and regard myself as simply a product of my environment, and my being and my life-struggle as simply aspects of a wider and all-determining course of nature, I shall be likely to answer in one way. The complex environment by which I am surrounded will be a system of fatalistically determining forces which leave no place for agency on my part and limit my existence strictly to the present temporal and physical order. What we have called the ordinary forces of the environment constitute the whole, and if we eliminate strictly from this complex any spiritual delusions, any groundless hopes

or superstitions regarding the life beyond this, or any values other than those bearing the stamp of the present life, we shall have the whole story. The problem of life to me will then become one of adjusting myself and my interests and ideals to the life of the present as it is determined within corporeal limits. The whole spiritual outlook of my life will shrink into the narrowest limits and my whole dream of the transcendent, with its content of ethical and religious ideals, will become an illusion to be banished by the clear light of day. My estimate of present values will be determined by the same standard of temporal and corporeal measurement, and I will find much of the sacredness of life disappearing and much of the value which I had been accustomed to attach to my own personality and that of my fellow men, gravitating toward zero, in spite of my efforts to keep it up to a high level. And though through a sort of after-glow of what I may choose to call superstition I am able to preserve some remnants of faith in my kind, I feel that I am playing a losing game. For why should a life which is robbed of its freedom and has become a mere by-play of struggling forces; a life which has no perspective but is strictly confined to the time-span of the present; why should such a life try to ape any sort of dignity or be anything but the thing of shreds and patches that it is? To be sure, a man may set his teeth and try to stem the tide by wresting some semblance of nobility from even such a situation, but then he is unconsciously deserting his own standard and committing himself to a nobler ideal.

The nobler ideal is simply the conception of life which the man adopts who realizes that his true place in the system is that of a free agent. He will not doubt the power of his environment or the fact that he is in a very important sense its product and is dependent upon it; but he will realize the fact that by virtue of his individuality he is a being capable of ideal, purposive action and may therefore rise above his environment in various ways and may even turn upon it and reform it. And in realizing his free-

dom he will also come to his own in a true conception of the relation of his life-struggle to the environment. This surrounding system of things is simply the world in the midst of which his conscious agency finds itself. It is the world he is to go out upon and overcome. Here, then, is the stage for the setting of the whole drama of realization. A man seizes his environment as his opportunity and his point of departure, notwithstanding the handicaps in his present, and from this point of departure goes out in that splendid effort through which he and his race are destined to overcome the world. And it is a splendid effort, replete with the riches of achievements, notwithstanding the heart-rending failures of it. For it is in his effort to play the free man that man *becomes* free, and the achievement of his charter as a free man is simply the whole struggle by which he overcomes the world and gives it its place in a system of realized experience. A man's environment is his opportunity to play the man, and in the system of efforts which he puts forth to prove his mastery he develops all those splendid powers the record of which so glorifies the page of history. As he moves on in his struggle he finds the need of larger faith as well as larger knowledge. The old aims give place to more generous ideals; the old ambitions to those that are more commensurate with his enlarging vision. For as he penetrates his world he finds it not only becoming larger but also richer. His individual ideals swell out into social ideals, his social ideals into ethical, and his ethical ideals into those of religion. The world of the ordinary natural and social is no longer adequate to his growing experience, for his horizon is everywhere shading off into the transcendent; his ideal of life is passing from the temporal into the eternal and no conception of experience is competent to fill out the measure of his requirements except one in which his finite spirit fellowships with God. Thus to a man who takes the attitude of a free man toward life, it becomes an arena for the realization of the highest ideals.

It is in the effort to work out his destiny in the world that a man comes into normal relations with the good and evil of the world. Let a man give up the struggle and become an idle spectator of the drama of other men's lives; or, without consciously giving up his own effort, let him take simply the spectator's chair in the life-assembly, and it will be impossible for him to reach anything like a true conception of life in its most vital relation to the good and evil of the world. It will no doubt be true to the end of time that the observers of the life-drama will be divided in opinion as to whether there be more of evil or more of good in the world. But this is not, after all, a very grave matter since the vital point at which you or I touch evil is in its connection with the struggle of our own life. Let a man take the attitude of the worker and not that of the idler, and things will fall into their true relations. Whether or not there be more of evil than of good in the world, the fact which confronts every man in his true attitude toward the world is that evil is a real factor in his life. It stands as the adversary to be vanquished, the negative to be suppressed, the obstacle to be overcome. And the good is just beyond; it is the goal of the struggle and comes as the crown of completed effort. This is not a show-world of ours, but a world of serious business in which evil confronts us without and within. It is our work to fight it in the world and it is above all our business to fight it within ourselves. The worst enemies are our own sins and temptations which assail us like traitors in the very citadel of our greatest strength. In overcoming the adversaries which block our pathway to the realization of the good our stubbornest foe is likely to be our own evil self, the self that stands as the maleficent embodiment of our sins and as the ideal of what we are tempted to become. Now it is out of man's connection with the evil which is in and about him that there arises one of his most vital relations to his environment. The problem of evil in its theoretic form is enormously complex, as we have seen, and

it is not at all simple in its practical relation to man's struggle to realize his end in life. But we have at least determined the true point of view from which a man is to contemplate the evil. Not as an idle spectator, but as a worker, does he come into normal relations with any of the forces in his environment. If, then, evil arises normally as a factor to be dealt with in working out our destiny, we may ask, what is this evil, practically considered; where are we to look for the hidings of its power; and finally, how is it to be overcome?

How are we to define practically the notion of evil? Clearly it cannot be conceived in purely objective terms, without reference to the life-struggle of man. We have seen that it is only in this struggle that it acquires a normal meaning for man. We have seen also that life is teleological and derives its whole meaning from some end of living which man is seeking to realize in his life purpose. Evil, then, will derive its significance to man from its relation to the end that he is seeking to realize. Practically, therefore, evil must be defined in terms of the end of living, and in order to determine what it is we must first reach some conception of that end. But have we not here come upon a problem of enormous difficulty? Who is equal to saying what that end of life is in relation to which anything may be practically evil? We may seek to cut the knot by saying that evil is always something that opposes and thwarts the realization of our purposes. And this is so far correct; evil does always present itself as an adversary. But may there not be evil purposes and may not that which opposes them and which stands in our path with the drawn sword be an angel of good rather than of evil? Clearly there may be an evil self which will seek to realize what stands opposed to the good. There may be lower and more perfect selves whose efforts are, in part at least, hostile to the good of the highest self. There may then be a conflict of ideals, and the question arises as to how this is to be resolved and the true ideal determined. Where are we to

look, then, for the true starting-point for defining what is to be regarded as evil in your life struggle and mine?

We have already struck upon a term which may suggest the way to a solution. We have said that there may be an evil self and a lower self which may stand in the way of the good of the higher self. This has a bearing on the question of the true end or purpose of living. This end will be the purpose of some self, but it will not be *any* purpose of *any* self. There may be false and defective ideals just as there are false and defective selves. That I take up a life-purpose and pursue it vigorously and consistently to the end does not prove my purpose to be good, for I may be serving the devil all my life. The important question with me is what purpose I shall take up as the end and guiding principle of my life-activities. Here I am brought face to face with the question of my power in the sphere of ideals as well as that of my responsibility for the choice of the right ideal. Have we the power of choice in the matter of ideals? Let us take any appeal which one man may make to another. The maker of the appeal cannot be sure that the one to whom he appeals will be able to perform the task he is asking him to undertake, especially if it be a very difficult one. Let this be an open question, then, regarding the man's ability. What is there left as the firm ground of the appeal? Only the presumption of the man's ability to choose the task as the aim of his effort. The task is not simply a certain process of labor which is to be gone through. It is an idea which is to be chosen by some one and made the end of his striving. Thus the reformer approaches the inebriate with doubt, perhaps, as to his ability to overcome his thirst for drink, but with the faith that the man has power to choose the ideal of a sober life, and this is the ground of his hope. There may be pathological cases where even this citadel of freedom has been lost, and we are not concerned here with the exceptional instance. But in the common instances of an evil life, it will be found that the germ of manhood sur-

vives in the ability to freely choose ideals of living. The conclusion we reach here is one that would follow logically, also, from our doctrine of man's relation to nature. He may be a product and even a victim of nature, but in his power of conceiving ideal purposes lies the germ of his free agency, and so long as this power survives he will retain his freedom in the sphere of ideals.

I take it, then, that my power in the choice of ideals cannot be called in question, and I may ask what position does this place me in with reference to the ends of living? It puts me clearly in the position of one who has the power to entertain and to choose to realize any among the ideals that may be presented to me or that may arise in my consciousness. I may be bound to any extent in the chains of habit and to any extent I may be enslaved to my environment, but I am not forced by any ideal. Here is the sphere of my freedom and power. I may choose the ideal of my life and through this ideal I may have power over the working out of my destiny. I may even break the chains in which evil habit has bound me. This being true, we are in a position to speak intelligently about ends of living. If I may choose my end, then, it will be possible for me, and perchance even necessary, to distinguish between ends which are good and others which are bad or defective. And this is just what my experience teaches me I have to do. I find, in the first place, that what I call myself is not altogether simple, but that it is in a sense a sphere of possibilities, a little universe of possible selves. And I find that what I call my cardinal self, the self which is final arbiter and which chooses among the candidates that present themselves, has the task of choosing the kind of self that the cardinal self wills to be and that on this choice depends the whole complexion of my life. We have only to study our psychology in order to see how this plurality of self-ideals can arise. My cardinal self has the choice between a purely isolated individual self which is likely to be egoistic and exclusive, and a more generous social, ethical and religious

self, which is likely to be altruistic in its response to its relations to others. It has also a choice between the mere fragmentary and temporal self of the present which is liable to be short-sighted and sensuous, and a metaphysical self which seeks the wholeness of life and whose perspective contains a blending of the temporal and eternal. Again, I find in myself an ideal which responds to the requirements of the ethically right and good and another which scouts righteousness and rebels against the law of duty. I find my cardinal self related to all these and, in addition, to a religious self which loves God and an irreligious blaspheming self which turns away from God and the religious life. What am I to do in view of such a complexity of conflicting ideals? Truly my cardinal self will need to be omniscient in order to choose wisely.

We have seen, however, that it is just this appearance of a plurality of unorganized and apparently conflicting elements that everywhere rouses science and philosophy to their task of organizing the world. And it is just here in this exigency that we shall begin to reap some fruit from the labors of our metaphysical investigation. If we remain true to our standpoint of experience and take our stand within experience and with that cardinal self of which we have spoken, we shall find that we are everywhere in the presence of positive and negative ideals; the positive being constructive and leading to some rational end, while the negative are destructive, negations of the positive, and lead to irrational results. In general, the positive will lead to the ideal of a world of reason and order, while the negative point to the oppositive of this, the realm of unreason and chaos. This is a general representation, but it means that experience in general presents a duality of ideals to the cardinal self at its center, and that for every ideal of good there will be an opposing ideal of negation and evil. At every stage in his experience man is confronted with double ideals and must choose whether at this point he will become a builder or a destroyer. This

will be his fundamental choice out of which all the other issues of his life will arise. Let us suppose a being with this cardinal power to become the subject of a growing experience like our own; he will find that at every point his present experience will seem fragmentary and unsatisfactory and will have true significance only in relation to an ideal of completeness which the present is going on to realize. As we have said, a cross-section of experience anywhere will reveal the palpitating heart of this ideal. In view of this his experience will present itself as a teleological process having the ideal of a completed life as its goal. All his struggles will organize themselves into a rational system in view of this ideal, whereas, if he were to repudiate this ideal or lose sight of it, his struggle would become irrational and his life a riddle. Again, if he looks upon his experience as a developing process he will find that it is marked by the growth of larger and larger ideals, each one of which embodies itself in a possible choosable self. Analysis, if he is skilled in it, will reveal to the adult a plurality of possible selves which, in fact, do sometimes clash in the experience of the best of men. He will find in his consciousness what we may call an isolated egoistic self, the kind of a being a man becomes when he attempts to segregate himself from his family, social or civic relations, and to think and act according to what he calls his own sweet will, which is likely to be a purely self-regarding will devoted to its own private interests and enjoyments. Associated with and sometimes colliding with this isolated self is what a man calls his family-self with which the points of view and interests of wife and children have become incorporated so that the family-self represents a larger and richer being, the bearer of interests, duties and responsibilities to which the narrower self is a stranger. Again, he finds his selfhood tending to take on larger social relations so that it becomes the organ of social reactions to which the mere family-self is a stranger. And this is true of a man's civic, ethical and religious experience. The car-

dinal self which is related to all these has the presentation of progressively larger and richer embodiments of selfhood, and when man comes to the study of the subject from the genetic point of view he obtains an additional insight in the discovery that these different ideals of selfhood represent successive stages in one process, the evolution of selfhood in experience. It is the prerogative of a growing experience to lead man progressively through the stages of a realizing process in which he responds to ever wider relations and becomes the bearer of an ever enriching life. And while it is true that these various standpoints survive in his experience, and that each becomes a center of a system of real and valid reactions, yet in a higher sense the whole progressive experience in which they emerge is one that leads up to the true and final ideal of experience, that of a complete life.

It would seem, then, that the *ideal of a complete life* is the true end which every man should place before him, and that the normal progress to this end is one in which he progressively realizes his individual, social, civic, ethical and religious selfhood. In other words, the process of experience which leads toward its normal goal, the realization of a complete life, is also the process which leads a man to respond normally to the family, social, civic, ethical and religious motives in his own nature and to their corresponding relations in the environment. It is not contended here that a man, in order to become a good man at all, must respond equally to all these motives and relations, or that he must respond at all to some of them. A man might be a good family man without caring much for his civic relations, and he might be a good citizen without responding vigorously to ordinary social relations. A man might be a good man morally and might realize a high and noble ideal of life without being responsive to the motives of religion. And he might realize a high religious ideal, like the mediaeval saint, while treating with neglect the ordinary family and social motives and relations. ' It may be said

even further in this same line, that the ordinary types which men realize in practical life are those in which some one or more of these points of view have become vitalized and form the dominant character of the individual life. A man may be conspicuously a selfish egoist, but he may also be a shining example of the man of family and society without taking much interest in politics or religion. He may also be the model public-spirited citizen without caring much for church or social club. And he may respond in the highest degree to the motives of morality, may embody the ideals of justice and righteousness in their highest form in his life and conduct, and yet at the same time be practically blind and unresponsive to the whole field of religious ideas and motives. All this is admitted and it is only contended here that the true pathway to completeness of life is through normal response to the motives and relations of this progressive ideal. It will remain true, notwithstanding the excellence of the special types, that the only road to *completeness* of life is the normal road of experience, and that only he can hope for completeness who responds to all the motives and relations of the process through which it comes.

In reaching this conception of the end of man's life-struggle we may not appear to be in full accord with what seems to be the accepted doctrine of much of the best ethics of the day, namely, that the end of life is self-realization. The end here favored, however, does not differ materially from that purposed by the ethical writers, since we, too, regard self-realization as the form which the end must take. In other words, life will be a completely realized selfhood. The highest life takes the form of self, and the realization of life is the realization of self. "Why, then, not adopt the term self-realization," the critic will say, "if that is what you mean, and be done with the discussion?" The answer to this will have two parts. In the first place, ethical terminology is not as yet so fixed that one may not exercise a certain license in the choice of words even when practi-

cally the same thing is meant. Now, in company with some others the present writer has a preference for the term completeness of life. But this is a matter of little moment. The other consideration has more weight. Completeness of life is more objective than self-realization, and the end in ethics should be stated as objectively as possible. Besides, without an explanatory clause self-realization invites, in a sense, a purely egoistic construction, and while this is not meant by the writers in question, yet by a kind of gravitation the meaning of a phrase will tend in the direction of its lower level. Furthermore, the end of living should be so phrased that it will be equally amenable to an egoistic and an altruistic application. What is needed is an ideal that will fit both the self and its other, an ideal that I can pursue for myself and for my fellow man, an ideal, in short, that will be common property and that will include self-sacrifice and self-renunciation as well as self-conserving and self-seeking. Completeness of life seems to fulfill such demands and it stands as the natural culmination and crown of a life-process.

We return now to the question of man's struggle with evil. The point of difficulty was to discover some criterion that would enable us to distinguish the evil from the good. We have found this in the end of the struggle which is completeness of life; and though there would no doubt be some ambiguity in this conception taken in the abstract, since it would still be open to ask whether it be the ideal of completeness entertained by the saint or the sensualist that is to be taken as the criterion, yet we have seen that this uncertainty largely disappears when we take the end in the concrete and connect it vitally with the experience-process which leads up to it. We have seen how the normal evolution of the process of experience brings a man into living relations with what we may call his personal, family, social, civic, ethical and religious obligations, and also how these successive stages constitute the realization of a progressively larger ideal, until at its climax the whole series is included

and unified in the final ideal of completeness of life. It is impossible, then, that a man should realize the ideal of his life, which experience places before him, unless he responds normally to all its stages as they develop in experience. This is the great lesson which the method of experience teaches us here. It connects men's effort with a living ideal which embodies itself in successive forms in response to the real relations of life, and which finally culminates in the ideal completeness of the process of which it has been the inspiration and the aim. We see that this relation is such as not to force man upon any Procrustean bed where the form of a living experience will be maimed and perverted, but it rather brings him into living relations with all the forces of his environment, so that he may respond to the man of Nazareth and the Buddhas of his environment as well as to its ordinary social and ethical motives. There is nothing in this world to which he may not be kin and respond to in a living way.

Now the evil in such a system as this will be that which thwarts or opposes the realization of this complete life either in its process or in the end at which it aims. The notion of evil is no longer indefinable, then, but has secured a definite meaning. The good is not necessarily the actual purpose that you or I are seeking to realize. We may be bad men consciously pursuing ends we feel to be detrimental, or we may be mistaken and our good may be partially or wholly illusory. The true end of living is one that is objective to us and which we must determine by using all the resources which experience puts into our hands. And we may be assured that no end will be the good which we ought to seek if it does not harmonize with the normal relations of a developing experience, and if it is not identical with an ideal of completeness which includes and unifies the whole process. Moreover, it is evident that a good thus defined and embodied will not be an end that will serve for the mere isolated subjective individual and not at the same time, for his race. The very mode in

which it develops, and its relation to a normal experience, secure for it a common as well as an individual character. The real ideal of living is at the same time all men's good and the good of you and me and of the stoker who serves our furnace. To each man it becomes a common objective ideal, individualized by his own special circumstances; an ideal around which he can organize his work for others as well as his efforts for his own welfare. The evil is, subjectively, the purpose which opposes or misses this objective aim, while, objectively, it is anything that stands in the way of the efforts which man puts forth for the realization of the good purpose. A man becomes one of the forces of evil when he opposes the good or when he places an imperfect and fragmentary good in the seat of the ideal. Objectively considered, evil is the whole system of purposes and activities that opposes the good purpose or misses its aim. This evil system stands in a man's pathway as a foe to true living, and whether it take the form of a slum to be abated, an organized wrong to be thrown down, a temptation to be withstood, or a sinful passion to be overcome, my relation to the evil is the same; I must hew away manfully at it until it disappears from the earth or from my own nature and some good has taken its place. This effort of mine may be individual, or it may be part of a larger organized movement of society, but in any case the principle and the end will be the same.

In a larger sense man's relation to the whole system of things, which he calls his environment, will be rationally determined by this ideal of living. We have seen how he maintains his freedom in relation to his environment through his power of ideal purposive activity. But finite purposes may be fragmentary and they may be evil or may miss their aim. A man can only rationalize his world and achieve freedom in the highest sense when he has conceived the ideal of completeness of life in the way pointed out above, and has made it the supreme and all-comprehending purpose of his activity. With this dominating purpose,

then, as the guiding star of his life-activity he is enabled to relate himself to the whole field of his experience in the way God is conceived as relating himself to the world. In fact, his life becomes a species of divine life and each element of his world tends to fall into harmonious relations with every other element and with the whole. We are here picturing the ideal to which all well-directed efforts will tend, but which no life, perhaps, will ever completely fulfill. The ordinary life of man proceeds for the most part on a lower level, a field of manifold efforts and fragmentary ideals, where it resolves itself into a fight against this or that concrete evil or into an effort to achieve this or that particular good in life. It is hard to maintain a sense of the unity of life in this field of unmitigated particularity, but it is here especially, where its absence seems to be most conspicuous, that the most efficient service of a true ideal of living may be rendered. If the true good and goal of living is the ideal of completeness of life, and if this ideal is to be realized by responding to the successive requirements which arise in a normal experience, then there can be nothing in true living that is foreign to the ideal. Just because of the fragmentary character of my ordinary experience, does it stand in living need of the unifying ideal, and it is just here in the field of everyday plurality, where I am liable to lose myself in the very multitude of details and my experience threatens to fall into fragments, that a strong grasp on the ideal proves my salvation and I feel that its power in my life has made me free.

The lesson we learn here is that man is the worker-out of his own destiny. He is not the victim of any environment, but has in him the power of a free agent and may react upon his environment and render it more serviceable to his needs. We moderns need to learn this lesson, since we have become so accustomed to the contemplation of the vast forces of the world which surrounds us and plays upon us that the profession of man's helplessness has taken on something of the sanctity of a religious cult. It is well, there-

fore, to have the charm broken and man the captive reinstated in his true franchise as a free agent and a master of his environment. The last word here, however, shall not be a paean to man's mastery over the forces that surround him, but rather a testimonial to his real need of his environment. The dependence of man on his environment is not altogether one that can be construed in terms of enslavement. It is only an evil environment that enslaves, whereas, as we have seen, the very environment that produces him may be also the condition of his true freedom. It is another side of this same relation that we wish to develop in conclusion. The vision we have is that of man's environment as tributary to his development. It is, therefore a vision of man's dependence on his environment for the means of realizing his own good. We have seen how the whole life-process in one aspect of it arises as a progressive response to the real relations of the environment. Man's dependence arises, then, out of the very nature of the situation and man's need of his environment as tributary to his development becomes apparent. How, then, shall we specify these needs so that he may take account of his indebtedness? We can only enter upon one line of specification here, as showing not only how his needs are declared but also how they are satisfied. We say that there is no such thing as an isolated self-sufficient individual in the world. No man liveth to himself, but, in the course of a normal experience, he becomes the bearer of family, social, civic and ethical, not to mention religious, relations. These bind him to his kind and to God and in a vital sense render him dependent on his kind and on God. This dependence expresses itself in two ways in his experience. In the first place, out of his living responses to these relations arise the fundamental principles by which his conduct is guided and determined as normal. We have seen in another place how out of the economic phase of his relation to his fellows; in fact, out of the very collision of group with group in the struggle

for maintenance, there emerge into consciousness those intuitions of *justice* and *right* and *sympathy* which constitute the guiding principles of so much of his life. We may generalize the example here and say that it is not by any power of *a priori* insight which man possesses, but rather through the touch of actual experience, and the taste of the actual struggle of life, that what we call the fundamental principles of conduct in every sphere are discovered. In this sense the principles which are to guide him in his normal progress through the world arise out of that progress itself. And this is a striking illustration of man's need of his environment. He stands in need of the nature that nourishes him; of his fellows who surround him; of God who stands in transcendent relation to him and yet enters vitally into his life. Without the ministrations of his environment he would be lacking in those guiding intuitions without which his life would be like a rudderless craft on an unnavigable sea. Again, he is dependent on his environment for the power and inspiration needed for the realization of his own ideals. Let the man who has been accustomed to the open life of society isolate himself from his fellows and endeavor to carry out his ideals in connection with the life of the solitary. He will find that the stimulus of the social medium has been a powerful agent in the activity of his life. The family man temporarily bereft of the society of wife and children experiences inevitably a kind of atrophy in his family affections and reactions. In a much more striking manner the citizen without a country, or the religious devotee without a church, finds the sources of his ordinary patriotic and devotional experience gradually drying up. So the man who becomes misanthropic loses the spring of activity which comes out of sympathetic relations with his fellows, and the man who becomes atheistic cuts himself off from the sources of divine strength.

In order to realize his destiny in the world man needs to recognize his dependence on nature, for it is through this

recognition that nature is able to become the nourishing mother of his freedom. He needs to recognize his dependence on his fellow men, since out of his relations with his fellows spring the guiding principles of his whole social and moral life, and it is in his relations with his kind that he connects also with the most vital springs of action. He needs to recognize his dependence on God, since it is in God that he finds the ultimate sources of his being and it is from his relation to God that there arises in his life the whole revelation of his connection with the transcendent, the whole vision of divine fellowship. It is only in his relation to God that the unity and rationality of his own life become apparent, and it is in God that the finite must ever seek for the most powerful springs of energy and hope in life. And finally, in view of man's struggle with evil and especially in view of his own moral weakness and sinfulness, he needs the divine in its function of *helpfulness*. A finite being, working out his destiny in an evil world and struggling, sometimes hopelessly, with his sins and temptations, is in need not only of God, but of the Christ, for it is only in his conscious relation to the divine helper of men that he can be assured that his own life will not fail and that he will stand in his lot at the end of his days.

SUPPLEMENTARY CHAPTER.

MAN AND HIS BELIEFS.

We have in the foregoing discussions endeavored to work out in detail a demonstration of the truth of the claim we have made for philosophy; namely, that its central business is the unification of truth. In the course of this demonstration it has become clear, we are led to hope, that this unity is achieved from one point of view, only in a synthesis of scientific and metaphysical insights and methods, while from another point of view it is reached through a synthesis of knowledge and belief. Now, it is from the standpoint of this latter synthesis that this supplementary chapter has been written. We have already given our reasons for taking as the criterion of belief,—as that which distinguishes its judgment fundamentally from a judgment of knowledge,—the fact that its determining consideration is some relation which it bears to practical good rather than to theoretic truth. Let the theoretic data be what they may, if they of themselves are not sufficient to work conviction, and the decision be ultimately determined by a practical motive, then the ensuing state of mind will be belief rather than a form of theoretic certitude. We have here, then, in the motive of belief, a phase of what James calls the "will to believe," and the points of doctrine which we wish to establish in these concluding paragraphs are, (1) the limit of will in matters of belief, and (2) the validity of the will to believe. As regards the first point, it is evident that

the *mere* will to believe is not an adequate ground for belief, for the simple reason that mere choosing to believe cannot produce *real* conviction. The mere will to believe can at best give rise to a species of make-believe. The will that engenders belief will always be a will that embodies a wish. The real will to believe is the wish to believe, and wish is the child of desire or interest. Now, to refer a conviction that rests on a theoretic interest to the will to believe is, of course, folly. It is only when the interest is practical that the attitude arising can be characterized as will to believe. Every belief, then, in so far as it is a true belief and not a theoretic judgment in disguise, will be a species of the will to believe. But the proposition is not simply convertible. We cannot say that every will to believe gives rise to a belief either in fact or by right. It thus becomes clear that the will has a limit in matters of belief, so that no one of us by willing can add a cubit to his stature. When, then, does the will to believe carry with it the power to constitute a real belief and not a mere make-believe? The answer is not far to seek. When the will to believe embodies a real desire or interest of the subject, so that the subject's welfare or happiness is in some way staked on the truth of what is willed. In this case, provided the desire be sufficiently *strong* and *persistent*, and provided there are no opposing considerations of a theoretic character strong enough to overcome the practical motive, a genuine individual belief will arise. Such a belief, however, may be strictly limited to the individual mind in which it has arisen. A belief, in order to propagate itself and become general, must rest on a *commonalty* of interest. There arises, then, a distinction between individual and common beliefs, the former belonging to the idiosyncrasies of individuals and being incommunicable, the latter being communicable and propagating themselves through communities.

We are not concerned here with the purely individual forms of belief, but rather with that species of belief which

is shared in by communities of individuals. Now, it is evident that a belief, in order to take on the communal form, must submit to some of the tests which we apply to theoretic propositions. The interest must, in the first place, be real. The belief must also bear the social test; it must be a common interest, felt, though perhaps not equally, by all the members of the community. When a belief thus becomes communal, the very fact that it expresses a common interest or desire clothes it, in its relation to the individual consciousness, with the force of a demand. If, now, we take our start from this result, namely, that the social beliefs, by which we mean those that are common and not individual, are enforced by demands which remove them from the sphere of the arbitrary and capricious, our problem will then take the form of an inquiry as to whether there may be beliefs resting on demands that can be accepted as possessing real epistemological value. In other words, may there be demand- or interest-judgments the denial of which would give rise on the practical side to a disturbance corresponding in gravity to a logical contradiction in the field of theoretic truth? Let us ask, in the first place, what conceivable conditions would fulfill this requirement, and, in the second place, whether any of our practical judgments rest on such conditions. The first part of our question will not be so difficult to answer as it seems. We have only to remember that the belief we are considering rests on some common interest or demand, in order to be convinced that the direct ground of belief is some practical good which the object of the belief directly subserves. If it were not for this there would be no sufficient reason for the existence of the beliefs. On the other hand, if these objects were objects of knowledge, there would be no occasion for the beliefs. Taking our stand on this notion of practical good we have only to determine how vital it must be in order to create a demand that shall have epistemological value or its equivalent. Can there be a practical situation that will present the counterpart in the field of will, of a

logical contradiction in the field of intellect? We can think of one, a situation in which what we acknowledge to be the highest issues of life are at stake and in which for the realization of these issues in the form of the highest good, or the most complete life, the objects of the belief are essentially necessary conditions. If such a belief, which is clearly conceivable, should prove to be actual, the requirements would be fulfilled in its case and we could say of it that our certitude regarding it is as sure a guarantee of its existence as would be a certitude of knowledge resting on theoretic grounds.

We have only to consider some of the fundamental metaphysical convictions of the race in order to reach the answer we are seeking. Here the deep-seeing Kant may well be our guide, since he has surely interpreted the profounder consciousness of men correctly in selecting as the three constitutional beliefs which the race is most tenacious in clinging to, those which assert the freedom and immortality of the soul and the existence of God. Kant, as we know, after his failure to discover adequate theoretic data for the assertion of these objects as objects of knowledge, found in the ethical consciousness, in the demands of the moral reason or will, grounds that justify him in postulating them as necessary conditions of moral good. We do not propose here to consider the value of the Kantian doctrine, but rather to deal with the situation which Kant has helped us to discover and formulate, on its own merits. Taking, for example, the problem of freedom, which is simply the question whether man's agency respecting his actions is real or only a phase of natural causation, we have already developed some theoretic grounds for an affirmative answer. For example, in the second division of this treatise we were led to stake the issue between freedom and natural causation on the moral situation that arises when duty and inclination come into conflict and in which man finds himself able to decide against inclination. We chose this as the only crucial test which our experience gives us, but as one that is sufficient to prove

the fact of an agency that cannot be accounted for under the rubric of natural causation. In the third part of the present work, in treating of man's agency we have dealt with it more broadly, taking the fact that man's volitions in his social, ethical and religious experiences are determined by the function of an ideal; this ideal always embodying the *telos* or end-consideration in view of which decision is reached. The nerve of the argument there was that, while natural causation may explain *habit* and the habitual in experience, when it comes to the fact of *accommodation* in which progress is made, some higher form of agency is needed and this is secured by the presence of the ideal. Now, we do not propose to consider how far the theoretic considerations here insisted on, go toward constituting a theoretic proof of freedom. They certainly do prove that the doctrine of freedom is reasonable and that no theoretic refutation of it is possible. When, however, we consider the fact that it is only from the standpoint of the practical consciousness that the motive for the assertion of freedom arises, it is natural to conclude that the strongest evidence of freedom will come from the same quarter. Let us suppose, then, that the ethical motive and interest have been eliminated from the problem. What we have left is simply the proof that man is formally free but has no practical motive for asserting real freedom as an important fact in his world of experience. It is only when the pressure of duty arises and man is brought face to face with the discovery that he has an ideal destiny pressing upon him, that he awakes to the necessity of exercising his *real* freedom and asserting for it the right of way in his world and in experience. It becomes evident, therefore, that man's freedom, in so far as he asserts it as an actual possession, is assured to him on practical rather than on theoretic grounds, and is held, therefore, as a belief rather than as a certitude of knowledge.

Take as another example, for which we also have high authority, man's belief in the existence of an all-wise

and beneficent God. We call this a belief here notwithstanding the fact that it has been one of the principal aims of the whole foregoing treatise to unfold the theoretic grounds for asserting the existence of such a being. The proof may be stated briefly in the following proposition. All those metaphysical considerations which go to establish the fact that the world is dominated by design and that the central and fundamental agency in it is one of prevision and purpose, are also considerations which go to establish the theoretic certainty of the existence of God. Now, without receding in any way from this conclusion, it still remains true that the existence of God only becomes vital as a practical belief rather than as a theoretic certitude. Why is this? The reason is not far to seek. Any proof of the divine existence from which the practical motives and interests of morality and religion have been excluded will be purely formal and there will be lacking on the theoretic side any motive for taking it very seriously or for regarding it as anything more than a more or less interesting speculation. If, however, we open the sluice-gates and turn on the tides of ethical and religious motives and interests, the machinery begins to move in earnest and the mill-stones of our logic find themselves grinding a real grist. For in the presence of the practical issues the proof becomes vital rather than merely formal, and the conviction which binds our souls to God takes the shape of a practical belief rather than a pale certitude of theoretic knowledge.

Let us consider, finally, the question of the immortality of the soul. Kant found the grounds for postulating this as a truth of the practical reason, in the fact that morality imposes on man an infinite ideal which can be realized only in an endless life. In the present treatise an effort has been made to develop the grounds of a theoretic proof of immortality. Without going into detail, the reasoning may be condensed as follows: A profound analysis of experience reveals the fact that man is a spiritual being whose selfhood is fundamental and whose most character-

istic and essential activity expresses itself in the form of previsional and purposive agency. This interpretation of man's nature and agency brings his life into vital relation with the purpose that dominates the world and consequently into relation with the being in whom this purpose is embodied. And the theoretic proof of immortality completes itself in the doctrine that the divine life stands related to the human as the fullness of the ideal, and as the life in which all the fragmentariness and imperfection of this present life will be transcended and cured. The theoretic proof of immortality consists, therefore, in showing that from the theoretic standpoint it supplies the ideally rational doctrine of life. But now, when this proof has been completed and it stands there in its formal perfection, it cannot be said that man, apart from his moral and religious motives and interests, has any very strong reason for asserting its reality. It is only when his moral destiny presses upon him and he begins to respond to a life-ideal which has no temporal limitations that the formal doctrine of immortality becomes precious to him. And more especially is it when the religious motives begin to vitalize and the soul is brought into living fellowship with God, that his own life begins to appear to him *sub specie aeternitatis* and he comes to believe in his soul as the bearer of an eternal destiny.

Now in the light of the foregoing it will not be so very difficult, we think, to determine, approximately at least, the limit of will in the determination of belief. It will be clear that will cannot determine indiscriminately all sorts of beliefs in view of all sorts of theoretic situations. If, for example, we were asked to believe something in the interests of practical good which actually involved a logical contradiction, we should refuse to do so with an energy proportionate to the clearness with which we realized the contradiction. Sheer will cannot overcome a primary species of theoretic certitude, whether that species be empirical or rational. Thus if either physics or mathematics has reached clear demonstrations of truth in its

own field it will be impossible for will, legislating in the interests of the practical, to force conviction *contra* these demonstrations. If, then, it were possible on theoretic grounds to develop a conclusive disproof of the proposition for which practical belief is asked, we should then be facing a situation in which the theoretic proof would have the right of way and no belief would have any right to assert itself against it. The only situation in which it is conceivable that the will to believe could determine real and genuine conviction, would be (1) in cases where there is absolutely no theoretic evidence either for or against and where the sole reason for asserting it to be true is practical; (2) in cases where there is a theoretic balance in favor of an assertion but one that falls short of formal proof; (3) in cases where the theoretic evidence in favor of the assertion is formally complete. Comparing these three cases, it will be clear that where there is absolutely no theoretic evidence either for or against, a practical belief cannot be very strongly grounded. For example, take the question whether some of the planets, of whose conditions we have no knowledge, are inhabited. In such a case we might experience, subjectively, the will to believe in its maximum strength, without being able to banish a sense of the complete incertitude of our belief. The second species of belief, as being supported by theoretic considerations falling short of formal completeness, would be stronger than the first, inasmuch as the theoretic data would establish at least a presumption in favor of the object believed in. Its theoretic contingency would, however, be an element of weakness, and the practical situation would need to be one of clear practical necessity in order to overcome this contingency and ground a genuine practical belief. No doubt many of our most vital and necessary beliefs fall under this category, which must be taken as providing a legitimate field for the exercise of the will to believe. The third category,—that of formal theoretic completeness,—is one in which the highest degrees of practical certitude are clearly attainable. To the

objection that the practical conviction here, however strong, is useless, inasmuch as the ground has already been covered by the theoretic proof, the answer has been given in part. In the first place, it is not certain that any theoretic proof would be forthcoming were it not for the pressure of the practical motives. Again, it has been shown that a formal theoretic proof abstracted from moral and religious considerations would not be likely to work a very strong degree of conviction. The living content of the certitude would after all be moral and religious and would translate it into a form of practical belief.

There is, however, more to be said in this connection. We have used the phrase *formally complete*. Now, a theoretic proof would be formally complete if it amounted to a demonstration so that the object demonstrated could be no longer doubted. But as a matter of fact, a proof may be formally complete without carrying with it any such coerciveness. For example, a proof is formally complete that demonstrates the complete *rationality* of a judgment whether it be one of knowledge or of belief. Thus, that the soul should be immortal or that God should exist, may be shown on theoretic grounds to be in accordance with the highest reason. And there are many who will concede this while denying to it the higher certainty of theoretic proof. It is important to have it understood at this point, however, that this lower form of theoretic certitude supplies all the theoretic support which the beliefs we have been treating require. If it be conceded in the case of either freedom, immortality or God's existence, that the theoretic evidence is complete in the sense of showing that the judgment in which it is affirmed is completely rational and, in fact, involves a higher rational ideal of existence than would be possible without it, then the belief has secured all the theoretic endorsement it needs. It may still be a debatable question on the grounds of abstract theory, but it is translatable into the certitude of a practical belief when the

force of the moral and religious motives are brought to bear on it.

Kant, in his practical philosophy, affirms that when a moral judgment possesses the practical necessity that elevates it into a postulate of moral reason, it thereby becomes *constitutive,* and by that he means that it becomes a sufficient *guarantee* of the reality of its object. We are prepared here to make a corresponding claim for those practical beliefs which, fulfilling the *criteria* of practical postulates, receive also, as we have pointed out, the formal endorsement of the theoretic reason. And in order that this claim may not be misunderstood we shall add a few sentences here to what has already been said on the subject of formal rational proof. What we mean by that phrase in this connection is precisely what Kant meant in his contention that the idea of God commends itself as in the highest degree rational. We mean by it that consistency with a rational conception of the world which is involved in the perception of the fact that what is affirmed in our judgment is in the highest sense reasonable, so that were the only criterion to be consulted in working out a world-scheme, the test of rationality, the object asserted in our judgment would be entitled to the highest credence. Now, it is clear in the light of all the data of experience with which we may acquaint ourselves through science and philosophy, that the judgments which affirm freedom, the immortal life and God, embody the highest dictates of rationality. But were these judgments considered as mere theoretic propositions altogether apart from practical demands, there is no reason for thinking that they would ever possess for us more than formal or speculative interest and value. And in view of the tendency of so much of our everyday experience, to blind us to the higher insights out of which such judgments spring, sceptical indifference and perhaps dogmatic unbelief would almost inevitably ensue. It is only when we relate these judgments to the exigencies and demands of morality and religion that they acquire the robust-

ness of concrete certitudes, and theoretic indifference is turned into positive conviction by the clinch of practical necessity.

We reach the conclusion, then, that while in general the mere will to believe is not an adequate ground for conviction, yet there is in the field of moral and religious experience a legitimate sphere for judgments of the will. It is in this field that the most fundamental convictions of men are to be found. And it is in dealing with these convictions that the very last resources of philosophy are called into exercise. If our appeal in philosophy be to pure theoretic considerations, then, however reasonable these convictions may seem, they are, nevertheless, found to transcend demonstration, and a kind of scepticism of the reason results. But when we admit the validity of practical necessity, of moral and religious demands, as grounds for belief, this scepticism is cured and it begins to be evident that these convictions lay hold on the foundations of the world. In their light, men see light and are able to walk the earth as free sons of the eternal and as heirs of the immortal life.

APPENDIX A.

As far back as 1894, my friend and colleague, W. B. Scott, in a paper in the *American Journal of Science, Vol. XLVIII,* reviewing Bateson's theory of individual variations as the method of evolution, broaches a theory the suggestion of which was derived from Waagen. Adopting Waagen's term *mutation,* he gives to it the meaning of a continuous process determined along definite lines by underlying and mere fundamental causes, to distinguish it from the more haphazard and discontinuous operation of individual variations. The evidence of paleontology, Scott maintains, is strongly in favor of the method of phylogenesis rather than that of variation. The former he compares to the storm-center of a cyclone, which proceeds uniformly in a path of its own, 'dependent not on the accumulation of the circulating winds but upon factors of a much wider significance.' The circulating winds themselves 'would represent the variations which occur at every stage in the history of a phylum, while the course of the storm-center would represent the phylogenetic change, or mutations.'

What Scott suggests here has been taken up and worked out in the now famous *mutation-theory* of Hugo de Vries whose experiments have taken the form of a more careful and exhaustive investigation of the development of plants than had ever before been undertaken, and who reaches the conclusion that *mutation* is not only the method of

evolution in plants, but that it is very probably the principal method throughout the whole domain of life.

I am not concerned here with the issue between the mutation-theory and its critics and opponents. It may be that in the end it will be found that mutation, variation and organic selection, have each their special spheres of influence and are severally dominant in different quarters of the biological map. The points I wish to emphasize are, (1) that among the mutationists themselves we find the same fundamental line of cleavage showing itself which we have noted elsewhere. For instance, while Scott and de Vries agree substantially on mutation as the prevailing method of phylogenesis, de Vries tends to align himself with the orthodox Darwinians and to assign a practical monopoly to natural selection; whereas Scott, in the paper I have already quoted, repudiates the omnipotence of the natural-selection-process, such as is maintained by Weismann and his followers, on the grounds that it asks us in Bateson's words "to abrogate reason." Scott admits that an objection lies against his suggested theory 'in its apparent appeal to a mystical directing force,' and says that 'such mysterious forces are to be admitted only when there is absolutely no escape from them.' 'This notion, however, of a directing factor in evolution may be altogether illusory, and yet it is difficult to shake off.' 'It may, after all, be only the expression of some general law which has not yet been formulated, but if it be real we shall not advance our science by shutting our eyes to it.'

(2) The mutation-theory, however wide its scope may be found to be, does not bring forward anything inconsistent with the general metaphysical doctrine we have developed in the preceding chapters. Whether mutation or variation pre-empt the field,—or, as Osborn suggests, a variety of processes be at work,—biology will never find itself absolved from the requirement of ultimate rationality. And whether 'the mystical directing force' of which Scott speaks be reducible to some general

law or not, is not a matter of such great metaphysical moment. For general law itself is the expression of reason, and so long as we are sure that the world must, in the last analysis, be rational, the grounds of our metaphysics are secure.

APPENDIX B.

THE doctrine of the preceding discussions is that consciousness is the great reality as well as the material which supplies the concepts and categories of the real in general. In taking this ground I do not limit consciousness to the cognitive function, or to mere awareness. It is awareness, of course, but it is much more. By consciousness I mean an activity, an energy that becomes aware of itself and its object. The fundamental and central form of consciousness, so conceived, is selfhood. In selfhood its inner nature expresses itself, and in selfhood it becomes the metaphysical subject of those categories which enable us to interpret the world in terms of its inner, and, from any other point of view, hidden nature. There seem to be, in the last analysis, just two alternative views of consciousness that can be regarded as at all rational. The one is that which conceives it as mere awareness and consequently, when logical, reduces it to the position of a mere spectator in the world. The other is the view advocated here; namely, that consciousness is an agent,—in fact the agent of agents,—revealing in its activity the truth and significance of the inner nature of things.

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